



# Optimizing FCL Delivery Process of Imported Goods by Sea

Enhancing Efficiency through Incoterms at VIN-AFREIGHT Joint Stock Company

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Bachelor's thesis

March 2024

Bachelor's Degree Programme in Purchasing and Logistics Engineering

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### **Optimizing FCL Delivery Process of Imported Goods by Sea**

Jyväskylä: Jamk University of Applied Sciences, March 2024, 40 pages.

Degree Programme in Logistics Engineering. Bachelor's thesis.

Permission for open access publication: Yes

Language of publication: English

### **Abstract**

VINAFREIGHT Joint Stock Company operates in the logistics service sector in Vietnam, with branches in many provinces and cities nationwide. This thesis studies the optimization of the Full Container Load (FCL) delivery process for imported goods by sea through the application of Incoterms at VINAFREIGHT Joint Stock Company. The research identifies areas that need improvement and potential risks, and proposes remedial measures by evaluating logistics activities, particularly the implementation of the FCL import delivery process by sea at VINAFREIGHT.

### **Keywords/tags (subjects)**

FCL, Incoterms, Optimizing, Full Container Loads, Importing Goods

### **Miscellaneous (Confidential information)**

No

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# 1 Introduction

## 1.1 Background

The concept of logistics originates from ancient Greece, initially arising from the need to support military operations. It was not until the 1950s that logistics became associated with business, driven by the increasing demand for goods transportation in an increasingly globalized world. There are many definitions of logistics, but the most widely recognized is by Edward Frazelle, President of the Georgia Institute of Logistics Research, USA, who stated: "Logistics is the process of moving materials, information, and money from suppliers to end consumers" (Supply Chain Strategy, 2003).

In Vietnam, the concept of logistics services was officially defined in 2005 in Article 233 - Section 4 - Chapter VI of the Vietnam Commercial Law. According to this law, "Logistics services are identified as commercial activities organized by traders to perform one or more stages including receiving goods, transportation, warehousing, yard storage, customs procedures, other paperwork stages, customer consultation, packaging, labeling, delivery, or other services related to goods as agreed with customers for remuneration" (Law No. 36/2005/QH11: Commercial Law, Article 233, 2005).

Logistics is a big industry in the world where 90% of items have been on board a ship and nearly 100% have been on board road transportation (Rushton et al. 2017). There are various definitions of logistics services, encompassing both broad and narrow meanings. In a broad sense, logistics is the process of optimizing the location and timing, transportation, and storage of resources from the initial point of the supply chain to the end consumer through a series of economic activities. In a narrow sense, logistics is understood as the process of importing raw materials for production, then manufacturing finished products, and distributing them through consumer channels, ultimately reaching the end consumer. Whether understood broadly or narrowly, the role of logistics is recognized as an applied science that provides tools to link economic activities within a company, a country, or globally through the supply of raw materials, production, distribution, and market expansion. It is used by business managers as a management tool to operate businesses efficiently. Despite its advantages, logistics still entails many risks that need to be thoroughly studied to further leverage its strengths and mitigate its weaknesses, thereby bringing more value.

Maritime transport is extremely important due to its ability to efficiently move large quantities of goods at lower costs compared to other transportation methods such as airplanes, trains, or road transport. A report by Eurostat in April 2024 indicated that the weight of goods handled at major EU ports increased by 1.3% in the second quarter of 2023 compared to the previous quarter. The increasing interdependence of countries through globalization has enhanced the efficiency of transportation solutions as nations focus on industries and engage in international trade to serve various markets.

According to the Consulate of the Socialist Republic of Vietnam, this country is one of many countries that has the longest coastlines in the world (3,260 km), with over 100 seaports and 48 bays. The Vietnamese Sea borders important international maritime routes, with numerous ships bustling with the transshipment of goods from Europe to Asia and vice versa. Although maritime transport still accounts for the largest proportion of freight transport services, there remain many gaps and barriers that prevent logistics from fully leveraging its strengths and competitive advantages, and from achieving the values that managers expect.

The questions "Why", "What are the causes of the obstacles", "Where are the bottlenecks", and "How to overcome them" continuously drive my research efforts to find answers. In 2023, during the third year at JAMK University, the author was accepted as an intern at VINAFREIGHT - a leading logistics company in Vietnam, which faces significant challenges, particularly in maritime transport. Stemming from these challenges, the topic "Optimize FCL Delivery Process of Imported Goods by Sea: Enhancing Efficiency through Incoterms at Hanoi Joint Stock Company" was chosen as the graduation thesis. The goal is to provide valuable proposals that can be applied to enhance the company's operational efficiency.

## **1.2 Objective, purpose, and research questions**

### **1.2.1 Objective and purpose of the thesis**

This thesis aims to optimize the process of delivering full container load (FCL) shipments for imported goods at VINAFREIGHT Joint Stock Company by clarifying the theoretical basis of FCL sea freight services and identifying bottlenecks in the FCL transportation process at VINAFREIGHT.

Despite being a company with extensive experience and abundant resources to provide services, VINAFREIGHT still faces many challenges such as delayed customs procedures, high transportation costs, slow delivery times, and significant competition from other companies in the same field. These challenges need to be identified as soon as possible and addressed with comprehensive solutions and actions, as they are crucial factors affecting the company's success.

The objective of this thesis is to provide information and propose applicable solutions to address these issues. By successfully achieving these objectives, the thesis also aims to contribute to the broader field of supply chain management and logistics, offering insights that can be applied not only at VINAFREIGHT but also in similar industry contexts. The research focuses on theoretical and practical issues in the process of transporting full container load (FCL) shipments for importing and exporting goods by sea at VINAFREIGHT.

### **1.2.2 Research questions**

To guide the research, the following questions will be addressed with multiple aspects to understand:

- I. What are the main challenges in the current FCL delivery process at VINAFREIGHT?

Regarding the challenges VINAFREIGHT had to deal with in the FCL delivery process, it is important to understand the working phases and point out the difficulties, which is an essential part to recognize and bring solutions to optimize the chosen delivery option in businesses. The answer to this question will be on the common issues and logistics industry's current situation, as well as looking deeper into VINAFREIGHT's business and giving thorough analyzation.

- II. How do Incoterms affect the efficiency of the FCL delivery process?

With the selected delivery option, FCL, numerous optimization factors must be considered. Incoterms are regarded as one of the most effective choices for the sustained growth of freight forwarders such as VINAFREIGHT, as they are considered the backbone of the industry.

III. What strategies can be implemented to optimize the FCL delivery process at VINAFREIGHT?

The selected analysis approach will be used to assess and provide the best outcomes for VINAFREIGHT by analyzing a variety of strategies and clearly demonstrating their selection in order to promote and improve the FCL delivery method.

## **2 Methodological Approach**

### **2.1 Research Design**

To theorize successfully the empirical evidence that has been gathered from the case study, it is important to consider how the case study fits into the theories that the author uses or develops (Lee et al., 2017). That is the reason why in this chapter, the methods used in the thesis are described academically and significantly explained (Figure 1). Optimizing the process of delivering full container load (FCL) shipments for imported goods by sea at VINAFREIGHT Joint Stock Company requires a multifaceted approach, utilizing both qualitative and quantitative research methods, making it diverse and more comprehensible. The methodology begins with direct internship at the company, applying theoretical knowledge combined with practical observation of ongoing activities at the company. Secondly, it involves identifying the research subjects and proactively gathering information from various sources about VINAFREIGHT's operations, such as the internet, reports, customers, company leaders, and employees. The quantitative method is implemented by studying and surveying logistics practitioners at VINAFREIGHT Joint Stock Company and collecting company records and industry reports to provide a comprehensive understanding of the operational context. The qualitative method is carried out through numerous interviews and conversations with the CEO and other members of the company, providing deep insights into the company's operations, challenges, and strategic perspectives.

Subsequently, the collected data will be compared and analyzed against Incoterms to identify discrepancies and anomalies. Next, a comprehensive analysis of the current FCL transportation process will be conducted to identify and detect bottlenecks and potential risks, if any. Additionally, the entire logistics chain from the point of origin to the destination will be mapped out to identify areas of delay or cost overruns that lead to economic losses or damage to the company's reputa-

tion. It would be beneficial if these analyses and proposals provided useful, implementable solutions to address and eliminate VINAFREIGHT's existing inadequacies or risks, thereby helping the company enhance operational efficiency and competitive position in the market.



Figure 1 Methodological Approach of the Thesis

## 2.2 Data Collection

### 2.2.1 Survey

Establishing the target population is the first phase in choosing who will get the organizational survey (Edwards J. E., 1997), thus, identifying the survey target at VINAFREIGHT is a must. To gather information about VINAFREIGHT's operations, a comprehensive survey was conducted, involving the Deputy General Director, Department Heads, and Logistics Management Specialists. The survey was carried out through interviews, Google Forms, and the collection of reports and documents related to the company's activities. The tools used in this survey included voice recorders, Notepad, Google Forms, etc. The survey, named "Risk Identification Survey," was conducted in early November 2023 when I began my internship and was in the process of finding a research idea for my graduation thesis. The survey results provided valuable information for preparing the 2023 internship report and the 2025 graduation thesis. Furthermore, this was an important data source for researching and proposing solutions to optimize the FCL import process by sea at VINAFREIGHT, thereby enhancing the company's operational efficiency and reputation.

The survey by Google Forms contains the following questions:

1. Please provide your name and your relationship with VINAFREIGHT.

2. Are you currently working in the logistics field or have you been trained in this field?
3. Are you familiar with Incoterms? If yes, please provide a brief explanation.
4. Are Incoterms considered commercial contracts, true or false?
5. Do you know the FCL shipping process? If yes, please provide a brief explanation.
6. Have you studied or worked with the FCL shipping process?
7. Are Incoterms applied in the company's shipping contracts? Please list the advantages and challenges of applying for the FCL process at VINA FREIGHT.
8. What is the FCL import management software used at VINA FREIGHT? Name a few similar management software, and in your opinion, which one is the most advantageous if applied at the company.
9. What percentage of customers chose the FCL process in the year? Please list some difficulties encountered when using the FCL process.
10. Besides FCL, what other processes does VINA FREIGHT use?
11. What were the challenges in the FCL import process in 2023?
12. What are the shipping trends in 2023? What benefits do you see these trends bringing to the FCL logistics operations?

The survey was conducted online for convenience and broad accessibility, with the participation of 15 personnel, including 3 middle managers and 12 employees involved in the FCL process and related departments. The questions were intentionally designed to identify bottlenecks, if any, and areas for improvement, such as the suitability of the FCL process, employees' understanding of Incoterms and FCL, areas of the FCL process that are still not optimized, and desired improve-

ments. With a carefully selected sample size representing various departments and levels of experience, the data collection process ensured diverse perspectives. Although there were some moderate responses, the survey results provided valuable insights that significantly contribute to the overall goal of enhancing the efficiency and performance of FCL deliveries.

### **2.2.2 Interview**

One common method in social science research is interviews. The strategy of using interviews for data analysis is being chosen because of the numerous ways in which the data may be analyzed. Hence, the interview is attractive to business, management and organizational researchers because of its variety and flexibility (Cassell C., 2015). Additionally, during the information-gathering survey, an interview was conducted with the Deputy General Director and other key stakeholders, including logistics managers and transportation coordinators, to gain insights into the Full Container Load (FCL) delivery process. Participants were selected based on their positions and backgrounds, ensuring a comprehensive understanding of the delivery process from various perspectives.

The interviews were conducted in person, facilitating a comfortable environment for open and honest discussions. This approach allowed the interviewer to quickly and flexibly access a wealth of upper-level information. Key insights were uncovered through thematic analysis of the comments, including the need for better container utilization strategies or pricing, and improved coordination with customs officials.

The interview contains the following questionnaires:

1. Please provide your name and your relationship with VINA FREIGHT.
2. What is the current operational model of the company? Are you aware of VINA FREIGHT's development strategy?
3. What are FCL, LCL, and Incoterms?

4. What are the trends in full container load (FCL) imports in 2023?
5. What are the challenges in the FCL import process in 2023?
6. How has the context of FCL import logistics changed in recent years? Is this change positive or negative?
7. What factors have contributed to these changes?
8. Can Incoterms replace commercial contracts?
9. Do you have any suggestions or desires for VINAFREIGHT to change or improve any aspect of the FCL process?

The interview process consisted of three steps: (1) preparation (time, location, question content, equipment), (2) conducting the interview, and (3) analysis and summarization (Figure 2).

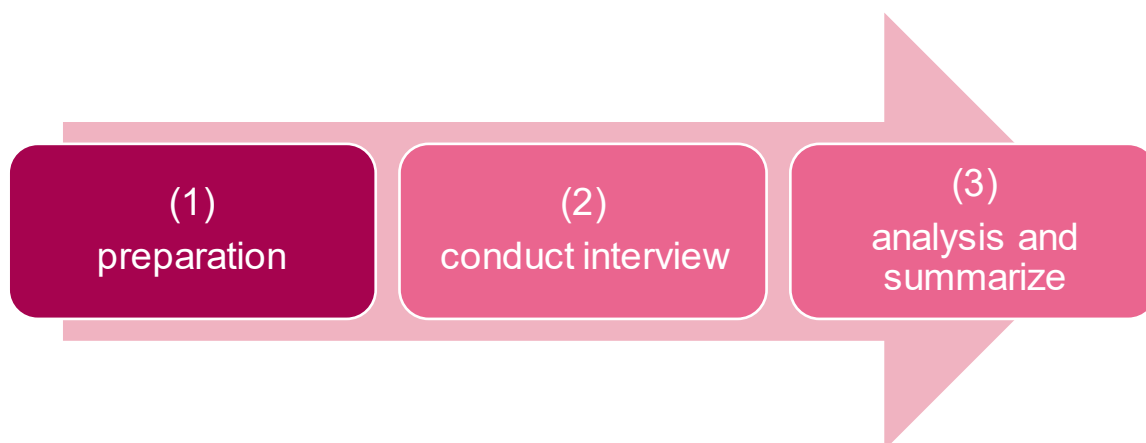


Figure 2: Interview Process for the Thesis

To conduct the interviews, thorough preparation was essential, including researching the interviewees and the topic, and preparing questions. During the interviews, the focus was on building rapport and asking open-ended, continuous questions to make the conversation natural and pro-

longed, while actively listening to gather valuable information. When recording, it was ensured that the equipment was checked, background noise minimized, and content accurately captured.

In the analysis phase, the recorded interviews were meticulously transcribed to identify key themes, and the responses were compared with other data sources to summarize the findings. Finally, the results were compiled to be concise, clear, and logical, using visuals to illustrate key points and ensuring the report was well-organized and free of jargon. This approach effectively helped the interviewer achieve their objectives.

The tools used in this interview process to collect information in written documents included "Notepad," "Microsoft OneNote," and "Notion," while for audio recordings, "Zoom," "Microsoft Teams," and "Voice Recorder" were used. The purpose was to assess the interviewees' knowledge and behavior related to the company's operations. Understanding the tactics of these interviews, the questions were presented in a continuous and open manner to gather in-depth information.

At VINAFREIGHT, the following interviews were conducted:

**Member of the Board of Directors/Deputy Director – Mr. Nguyen Ngoc Nhien:**

The interview focused on VINAFREIGHT's business development and management goals to achieve these objectives. Mr. Nhien Nguyen stated that choosing a sustainable business model, guided by the Win-Win business philosophy, helps VINAFREIGHT turn challenges into opportunities, gradually achieving the goal of becoming the leading logistics service provider in Vietnam.

According to Mr. Nhien Nguyen, to achieve this goal, since the beginning of 2023, VINAFREIGHT has undertaken comprehensive reforms, enhanced management capabilities, chosen Incoterm 2020 for implementation, and strengthened customer care for traditional and major clients. The company has also made efforts to seek new potential customers and boldly invested in developing maritime logistics services. This is considered a leverage point for the company, with the expectation that revenue from this segment will reach 900 billion VND, equivalent to 45% of VINAFREIGHT's revenue by 2025, bringing the company's total revenue to approximately 2,000 billion

VND. The projected dividend rate is 7.4%, and the average per capita income is expected to reach 17 million VND by 2025.

**Head of Logistics Department – Mr. Pham Thanh Long:**

The interview focused on the implementation of FCL import logistics services in the first six months of 2023 at VINAFREIGHT – the advantages and difficulties in maintaining operations during this period. Mr. Long Pham stated that the logistics industry in general and VINAFREIGHT in particular have just emerged from an unprecedented dual crisis, the aftermath of which will take considerable time to overcome. Currently, while some sectors are still experiencing negative growth, there are signs of recovery in certain business activities, albeit at a low level. Many supply chains have been disrupted, and there is a severe labor shortage, leading to numerous companies filing for bankruptcy, painting a truly bleak economic picture.

At VINAFREIGHT, the number of transport orders decreased significantly, but early and correct steps such as selecting and applying the appropriate version of Incoterms, building strong and reliable relationships that helped retain some of the company's major and traditional customers, signing framework agreements with some agents/intermediaries with flexible terms based on a win-win spirit, always listening to and prioritizing the interests of the company and customers, and implementing employee care and motivation policies that fostered unity and maintained company operations were also factors contributing to the company's success. However, the biggest challenge for VINAFREIGHT was the inability to reduce service costs. This posed significant difficulties in retaining loyal customers and attracting new ones, especially when many other logistics companies were willing to reduce their profit margins to secure contracts and maintain their operations.

The purpose of this interview was to understand the status of the delivery process, customer expectations, and the company's strategies. The questions aimed to determine the company's proactivity in identifying risks and finding solutions to address and eliminate these risks as soon as possible, while continuously improving the FCL transportation process for higher efficiency. Questions related to contracts, delivery techniques, "standard delivery procedures," "investment in modern facilities and equipment," and "the unwritten rules of Incoterms" were clarified, including how to navigate responsibilities when potential risks arise. Additionally, the interviewer inquired about

future trends in the delivery process related to multimodal transport. The responses indicated that FCL transportation would suggest future customer preferences for transportation methods and the company's development direction.

**Logistics Management Specialist – Mr. Nguyen Xuan Truong**

Mr. Truong Nguyen is responsible for planning the procurement of equipment and tools for FCL import and export operations. The interview focused on issues encountered during the delivery process and proposed improvements. It was mentioned that in the first half of 2023, social distancing measures were still in effect in some localities during outbreaks, causing difficulties in travel, work, and delivery. This period also saw the introduction of additional paperwork and procedures such as vaccination certificates, travel permits, COVID-19 test results, and external disinfection of goods, increasing delivery times for customers. Mr. Nguyen also emphasized the necessity of comprehensive surveys and studies to assess risks throughout the delivery process and propose solutions to mitigate these risks.

The company's current import-export management software is outdated and incompatible with some devices, requiring an upgrade to a newer version or the adoption of new software such as "Viindoo" or "WeUp ERP" (Figure 3).



Figure 3: WeUp ERP - Mr. Nguyen's ERP Software Recommendation

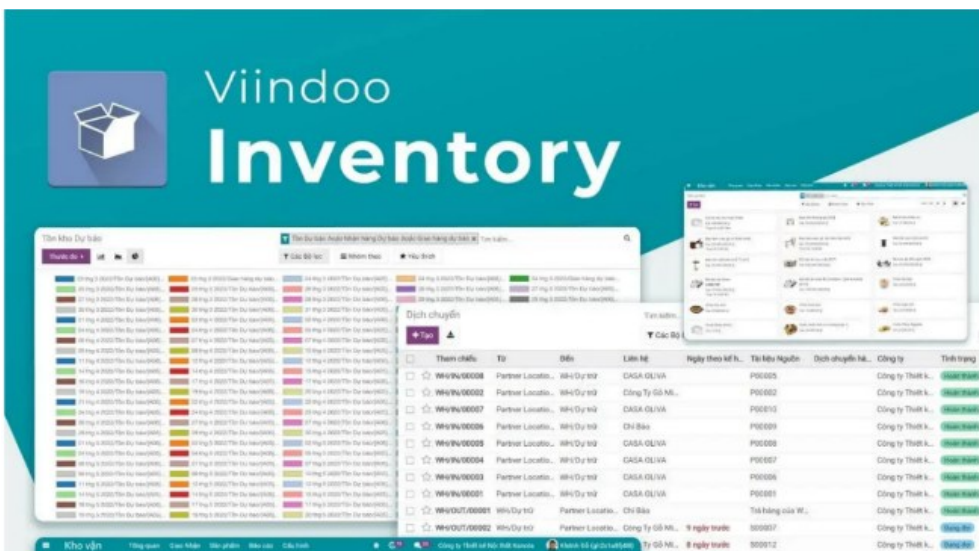


Figure 4: Viindoo - Mr. Nguyen's ERP Software Recommendation

It can be said that the questions were posed to an individual who has worked at the company for five years and has extensive experience in customer transactions, product handling, and customs procedures. The goal of the interview was to identify limitations and shortcomings in the FCL transportation process. Specifically, the focus was on detecting and addressing bottlenecks from

an expert with extensive knowledge and experience, which significantly enhances the quality of the thesis content.

Mr. Truong Nguyen further stated that the uneven levels of expertise, customer interaction skills, and situational handling experience among colleagues, along with bias and unfair treatment from senior management, were also listed as risk factors that could harm the company. This qualitative finding complements the data and provides insightful proposals to improve the FCL transportation process.

### **2.2.3 Company Records**

During the internship at VINAFREIGHT, several reports and related documents were collected from the archives, such as annual reports, contracts, bills of lading, profit and loss statements, VAT invoices, and debit notes. Additionally, system documents were accessed (with limited access to ensure information security) via computer. These documents provided both an overview and detailed information to support the research.

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**VINAFREIGHT**  
International

**P/L SHEET**  
*Import (Sea FCL)*

Create date: 15 Aug, 2023

Job No. : HNOIF2308/0006      Agent :

Vessel/Voy :      P.O.L/P.O.D : SHANGHAI / HO CHI MINH PORT,  
VIETNAM

Provider :      ETD/ETA : / 15 Aug 2023

Volume : 01X20'DC      Shipper : HUANGSHAN JIEHUI  
ENVIRONMENTAL PROTECTION  
TECHNOLOGY CO., LTD.NO.1  
YANGGUANG ROAD,SHEXIAN  
ECONOMIC DEVELOPMENT  
ZONE,HUANGSHAN CITY,ANHUI  
PROVINCE,CHINA

Commodity :      Consignee : NIN SING LOGISTIC CO.,LTD

M-B/L No. : POBUSA230880120      K.O.S : FREE-HAND (Vũ Xuân Trường)

H-B/L No. (Ref No.): JWFEM23080325      Container No. : N/A

Description	Q'ty	Unit Price	Amount	R.Amount	Sales	Payable Acc	Inv No.	Remarks
				(USD)				
<b>I. REVENUE</b>								
CIC FEE	01X20'DC	130.00	140.40 USD	140.40	130.00	NIN SING LOGISTIC	0002092	
CLLANING FEE	01X20'DC	15.00	16.20 USD	16.20	15.00	NIN SING LOGISTIC	0002092	
CUSTOMS	1 SHIPMENT	1,000,000	1,080,000 VND	44.41	42.52	NIN SING LOGISTIC	0002092	
D/O FEE	1 SET	30.00	32.40 USD	32.40	30.00	NIN SING LOGISTIC	0002092	
HANDLING FEE	1 SHIPMENT	25.00	27.00 USD	27.00	25.00	NIN SING LOGISTIC	0002092	
NĂNG HẠ CONT	01X20'DC	842,593	910,000 VND	37.42	35.82	NIN SING LOGISTIC	0002092	
OCEAN FREIGHT	1 SHIPMENT	25.00	25.00 USD	25.00	25.00	JW		
ORIGIN THC	01X20'DC	130.00	140.40 USD	140.40	130.00	NIN SING LOGISTIC		INV 2092
PHÍ CHUYỂN XE BỐC TAY THỦ CÔNG	1 SHIPMENT	2,000,000	2,160,000 VND	93.51	85.03	NIN SING LOGISTIC		INV 2092
PHÍ CƠ SỞ HẠ TẦNG (1537663),(CL001179)	1 LÔ	250,000	250,000 VND	10.82	0.00	NIN SING LOGISTIC	1537663	
TRUCKING VÉ BÀI DỠ HÀNG	1 SHIPMENT	3,000,000	3,240,000 VND	140.26	127.55	NIN SING LOGISTIC		INV2092
TRUCKING XE TẢI	1 SHIPMENT	3,000,000	3,240,000 VND	140.26	127.55	NIN SING LOGISTIC		INV 2092
<b>Sub Total</b>				<b>848.08</b>	<b>773.47</b>			
<b>II. COST</b>								
0	01X20'DC	0	0 VND	0.00	0.00	NGUYEN MANH DUNG		
NĂNG HẠ CONT	01X20'DC	842,593	910,000 VND	39.39	35.82	TMS		

18 Sep, 2023 2:23 30PM page 1/2 Prepared by TRẦN THỊ HOA

Figure 5:Draft "P/L Sheet" of VINAFREIGHT Joint Stock Company.

Shipper (Complete Name and Address) <b>HUANGSHAN JIEHUI ENVIRONMENTAL PROTECTION TECHNOLOGY CO., LTD.</b> NO.1 YANGGUANG ROAD, SHEXIAN ECONOMIC DEVELOPMENT ZONE, HUANGSHAN CITY, ANHUI PROVINCE, CHINA TEL: +86-559-6519886 FAX: +86-559-6683418		B/L No. JWFEM23080325	
Consignee (Complete Name and Address) <b>NIN SING LOGISTICS COMPANY LIMITED</b> 117/2DL HO VAN LONG, TAN TAO WARD, BINH TAN DISTRICT, HO CHI MINH CITY, VIET NAM		 <b>SHENZHEN JW INTERNATIONAL TRANSPORTATION CO., LTD</b> <b>BILL OF LADING</b>	
Notify Party (Complete Name and Address) <b>NINJA LOGISTICS PTE. LTD</b> 3 KAY SIANG ROAD SINGAPORE (248923)		RECEIVED in apparent good order and condition except as otherwise noted the total number of Containers or other packages or units enumerated below for transportation from the place of receipt to the place of delivery subject to the terms and conditions hereof. One of the Bills of Lading must be surrendered duly endorsed in exchange for the goods or delivery order. On presentation of this document duly endorsed to the Carrier by or on behalf of the Holder of the Bill of Lading, the rights and liabilities arising in accordance with the terms and conditions hereof shall, without prejudice to any rule of common law or statute rendering them binding on the Merchant, become binding in all respects between the Carrier and the Holder of the Bill of Lading as though the contract evidenced hereby had been made between them. IN WITNESS whereof the number of original Bills of Lading stated under have been signed, all of this tenor and date, one of which being accomplished, the other(s) to be void. For delivery Please apply to: <b>VINAFREIGHT JOINT STOCK COMPANY</b> 1ST FLR, BLOCK C, WASECO OFFICE BLDG, NO 10 PHO QUANG STR, WARD 2, TAN BINH DIST, HO CHI MINH CITY TAX ID 0302511219 TEL: (+8428) 3844 6409 FAX: (+8428) 3848 8361 EMAIL: AMY.PHAM@VINAFREIGHT.COM.VN	
Pre-carriage by	Place of Receipt	Final Destination Type of Movement CY-CY	
Ocean Vessel / Voy No.	Port of Loading	Description of goods Gross Weight, kgs Measurement m <sup>3</sup>	
INVICTA 1037W	SHANGHAI, CHINA	SHIPPER'S LOAD COUNT & SEAL S.T.C. PAPER BOWL HS CODE: 482369900 2,783.830KGS 28.4700CBM	
Port of Discharge	Place of Delivery	Total number of Containers or other Packages or units received by the Carrier (in Words) SAY ONE (1X20'GP) CONTAINER ONLY.	
CATLAI, HO CHI MINH, VIET NAM	CATLAI, HO CHI MINH, VIET NAM	Freight & Charges Revenue Tons Rate Per Prepaid Collect FREIGHT COLLECT	
Marks & Number Container No. / Seal No.	Quantity and packages	Exchange Rate Prepaid at Payable at Place and date of issue SHENZHEN, CHINA 19AUG2023	
N/M	409 CARTONS	S/O No. POBUSHHA230880120	
POLU2005632 / 20'GP / PANP635918 / 409CARTONS / 2,783.830KGS / 28.4700CBM		No. of Original B(s)/L THREE (3)	
LADEN ON BOARD THE VESSEL AND DATE 19AUG2023		 As Agent For the Carrier	

Figure 6: Draft "Bill of Lading" of VINAFREIGHT Joint Stock Company.



Tầng 7, số 25, Phố Vũ Ngọc Phan, Phường Láng Hạ, Quận Đống Đa, TP Hà Nội, Việt Nam, Vietnam  
 Tel: (84-24) 37 32 25 40 Fax: (84-24) 37 32 14 52  
 E-mail: long-nc@vinafreight.com.vn  
 Website: www.vinafreight.com.vn

To NGUYEN MANH DUNG  
 Address SỐ TK 1024310544-vietcombank số CCCD: 034099000291  
 Tel/Fax /  
 Taxcode 034099000291

Ref No. :

Issue Date :

### CREDIT NOTE

Job No. : HNOIF2308/0006 M-B/L No. : POBUSH230880120  
 POL : SHANGHAI POD : HO CHI MINH PORT, VIETNAM  
 ETD / ETA : / 15 Aug, 2023 Vessel :  
 Consignee : NIN SING LOGISTIC CO.,LTD Volume : 0.00 (CBM)  
 HBL / HAWB NO : **JWFEM23080325** Q'ty : 01X20' DC(0)

Description	Q'ty   (Unit)	Price	VAT %	Curr.	Debit	Credit
<b>+ OTHER CHARGES</b>						
COMMISSION	1.00 20' DC	700,000		VND		700,000
<b>TOTAL</b>						<b>700,000 VND</b>
<b>BALANCE DUE: NGUYEN MANH DUNG</b>						<b>700,000 VND</b>

E. & O.E  
 IN WORDS:  
 VN DONG SEVEN HUNDRED THOUSAND.

#### BANKING DETAILS:

**ACCOUNT NAME** : Chi nhánh công ty cổ phần VINAFREIGHT tại TP. Hà Nội  
**BANK NAME** : SGD NH TMCP Ngoại Thương Việt Nam  
**BANK ADDRESS** : 31-33 Ngõ Quyền, Hoàn Kiếm, Hà Nội  
**SWIFT CODE** :  
**ACCOUNT NO** : USD: 0011370584043  
 VND: 0011000584033

For and on behalf of VINAFREIGHT HANOI

Date  
 Authorized signature

Figure 7: Draft "Credit Note" of VINAFREIGHT Joint Stock Company (VND).

STT (No.)	Tên hàng hóa, dịch vụ (Description)	Đơn vị tính (Unit)	Số lượng (Quantity)	Đơn giá (Unit price)	Thành tiền (Amount)	
(1)	(2)	(3)	(4)	(5)	(6)=(4)x(5)	
	Job No: SPOF2080004					
1	PHÍ CHỨNG TỬ	Bộ	1	4.871.077	4.871.077	
2	PHÍ ĐẠI LÝ	Lô	1	243.300	243.300	
Cộng tiền hàng (Sub total):					5.114.377	
Thuế suất GTGT (VAT rate): 8%					Tiền thuế GTGT (VAT amount):	409.150
Tổng cộng tiền thanh toán (Total payment):					5.523.527	
Số tiền viết bằng chữ (Amount in words): Năm triệu năm trăm hai mươi ba nghìn năm trăm hai mươi bảy đồng						
Người mua hàng (Buyer)			Người bán hàng (Seller)			
			<div style="border: 1px solid black; padding: 5px;"> <p>Signature Valid</p> <p>Ký bởi: CÔNG TY CỔ PHẦN VINAFREIGHT</p> <p>Ngày: 30-08-2023</p> </div>			
<p>Mã của cơ quan thuế (Tax authority code): 0044FCC9EE36064D109C3DCFIAFD14B926</p> <p>Trang tra cứu: <a href="http://0302511219-d.easymyinvoice.vn">http://0302511219-d.easymyinvoice.vn</a> Mã tra cứu: Y6k3g8G20899093466976500</p> <p>(Cần kiểm tra, đối chiếu khi lập, giao, nhận hóa đơn)</p>						

Figure 8: Draft "VAT Invoice" of VINAFREIGHT Joint Stock Company (VND)

#### **2.2.4 Observation**

Understanding the intricacies of global commerce and the ways in which Incoterms—standardized trade terminology issued by the International Chamber of Commerce (ICC)—affect different facets of global business requires an analysis on Incoterms. It ensures seamless and effective trade operations by helping to define the obligations, expenses, and dangers associated with foreign transactions.

An extensive summary of Incoterms, their background, and their application in global commerce can be found in a literature review. They clarify the responsibilities and duties that buyers and sellers have in various types of transactions. Incoterms assist in identifying and managing risks related to international trade, including disputes, transit risks, and customs procedures.

Businesses can save expenses by selecting the appropriate Incoterm for their contracts by being aware of the fees associated with each term. Reviewing the documents can help companies understand the legal implications of using certain Incoterms, ensuring compliance with relevant rules and regulations. By identifying areas where knowledge or understanding of Incoterms is lacking, research can help us better grasp how they impact global trade

### **2.3 Data Analysis**

The data analysis section of this thesis will include the classification, evaluation, comparison, and analysis of the collected data to determine the suitability of the model and the correctness of the implementation process. This analysis will identify any inconsistencies and risks to the continued management of the company and address these issues by optimizing the FCL transportation process. The data analysis process begins with organizing the data using Excel and Notepad, ensuring the accuracy and consistency of the collected information. The integration of quantitative and qualitative methods has provided a coherent and comprehensive understanding of the transportation process, making it easier to identify inconsistencies for focused analysis.

### 3 Research Content

#### 3.1 Incoterms

Incoterms (International Commerce Terms) are a set of international trade rules that define the responsibilities of parties in commercial contracts. Incoterms include standardized international trade terms recognized and widely used by many countries and territories around the world.

Incoterms were first introduced in 1936 to provide a common set of rules for international trade, preventing misunderstandings between trade partners. The initial version included six terms, and subsequent versions have been updated and revised to accommodate changes in global trade practices. The latest version, Incoterms 2020, includes eleven terms applicable to various modes of transport.

The purpose of Incoterms is to clarify common trade conditions. They clearly delineate responsibilities, costs, and risks during the transfer of goods from the seller to the buyer. This ensures that all parties have a unified understanding, avoiding or minimizing disputes arising from different interpretations of fundamental rights and responsibilities.

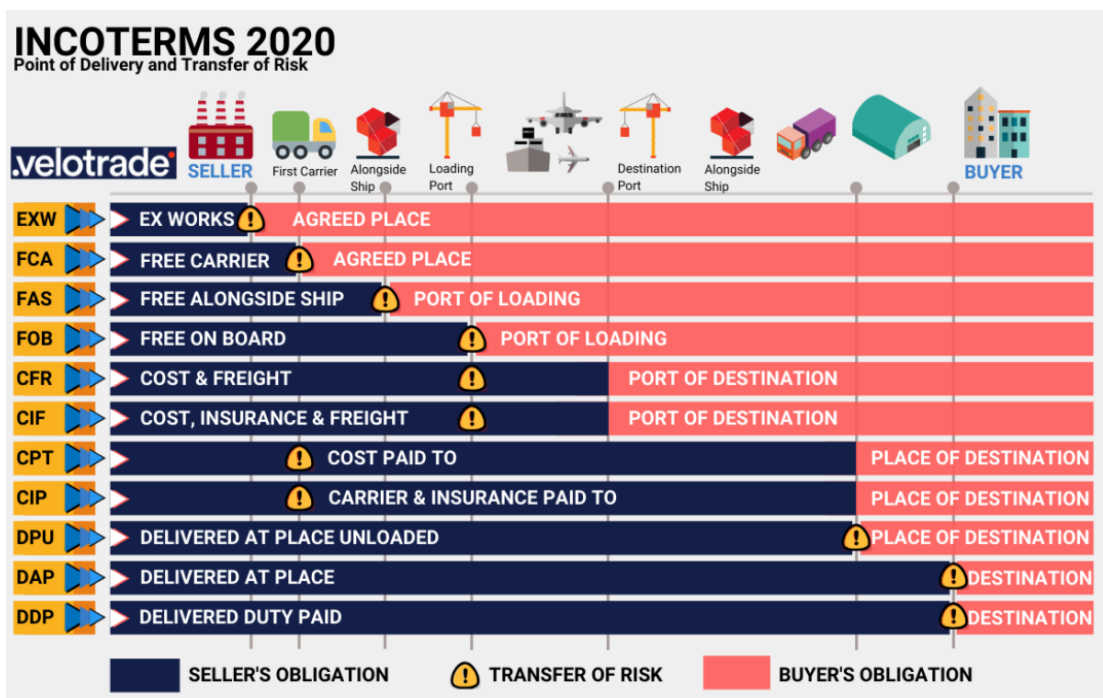


Figure 9: INCOTERMS 2020 explained (VeloTrade, 2023. *What are Incoterms*)

### **3.1.1 The role of Incoterms in international trade**

Incoterms play a crucial role in international trade by providing clarity and reducing misunderstandings between buyers and sellers. These terms clarify who is responsible for various costs, risks, and tasks that help define the point at which the risk and responsibility for goods transfer from the seller to the buyer, while reducing the potential disputes (Segal, T., Investopedia, 2024).

Incoterms serve as guidelines, encouraging buyers and sellers worldwide to freely adopt them rather than functioning as a form of international trade law. Incoterms become legally effective when both the buyer and the seller voluntarily accept and incorporate them into their contracts. This means that both parties must strictly adhere to the obligations outlined in the Incoterms.

The duties, costs, and performance of services, including import and export procedures, pricing, insurance, and transportation services, are clearly specified in Incoterms. Therefore, if a company uses multiple Incoterms in its import and export activities, it will successfully diversify its pricing strategies and customer services, meeting the needs of various customer segments within the same import-export business.

### **3.1.2 Main terms in Incoterms 2020**

#### **EXW – Ex Works**

The term "EXW" or "Ex Works" indicates that the seller fulfills their delivery obligation when they make the goods available to the buyer at the seller's premises or another specified location (such as a factory, warehouse, etc.). The seller is not required to load the goods onto any collecting vehicle or handle export clearance procedures, if applicable (Incoterms, 2020).

"EXW" places minimal responsibility for the seller and maximum responsibility for the buyer. The seller is responsible for packaging the goods and bears the costs and risks associated with loss or damage before loading (prior to shipment). Once the goods are loaded, the buyer assumes all subsequent actions, costs, and risks. This term is commonly used by companies seeking to minimize their responsibilities and risks during transportation, such as manufacturing and production companies that focus solely on production rather than logistics. By doing so, they transfer responsibility for the transportation and export process to the buyer.

**FCA – Free Carrier**

The term "FCA" or "Free Carrier" stipulates that the seller fulfills their delivery obligation when the goods are handed over to the carrier or another party designated by the buyer at a predetermined location (Rowbotham M., 2014). This location can be the seller's premises or another specified place. Additionally, the seller is responsible for export clearance procedures, if applicable. Once the goods are handed over to the carrier, the buyer assumes all risks and costs associated with transporting the goods to their destination. This term provides flexibility and clarity in the allocation of responsibilities between the buyer and the seller, facilitating smoother international transactions.

**FAS – Free Alongside Ship**

The term "FAS" or "Free Alongside Ship" means that the seller's obligations are fulfilled when they place the goods alongside the ship chosen by the buyer at the agreed port of shipment. This can be on the quay or on a barge. From that point onward, the risk of any loss or damage to the goods transfers to the buyer, who also assumes all costs from that moment forward. This term, defined by the International Chamber of Commerce (ICC) in 2010, clearly specifies when the seller's responsibility ends and the buyers begin, ensuring that both parties are aware of their roles and risks during the transportation process.

The terms "FAS" and "FCA" (Free Carrier) are quite similar in how they allocate duties between the seller and the buyer. The main difference lies in the location where the primary transportation process occurs. With "FAS," this process takes place at the port, meaning the seller's responsibility ends when the goods are placed alongside the ship. On the other hand, "FCA" is more flexible because the primary transportation process can occur at any agreed location, not just at the port. This means that under "FCA," the seller delivers the goods to a carrier, or another party designated by the buyer at a specific location, which could be a terminal, warehouse, or another site. This distinction provides more options regarding where the risk and responsibility transfer from the seller to the buyer.

**FOB – Free on Board**

The term "FOB" or "Free on Board" means that the seller's responsibility is to get the goods onto the vessel nominated by the buyer at the agreed port of shipment. Once the goods are on board the ship, the risk of any loss or damage shifts from the seller to the buyer. From that point on, the buyer also takes on all costs. The seller is responsible for handling all the necessary procedures until the goods are on the vessel. However, it is important to note that this does not mean the seller has to insure the goods. The term, defined by the International Chamber of Commerce (ICC) in 2010, clearly outlines when the seller's duties end and the buyers begin, ensuring both parties understand their responsibilities in the shipping process.

**CFR – Cost & Freight**

The term "CFR" or "Cost and Freight" means that the seller's job is to get the goods onto the ship or make sure they are already on board. Once the goods are on the vessel, the risk of any loss or damage shifts from the seller to the buyer. The seller also must arrange and pay for the transportation costs to get the goods to the agreed port of destination. However, it is important to note that the seller does not have to insure the goods for the journey before they are loaded onto the ship. Their main responsibility is to ensure the goods reach the vessel safely. This term, defined by the International Chamber of Commerce (ICC) in 2010, helps clarify who is responsible for what, making sure both the seller and the buyer understand their roles and risks in the shipping process.

**CIF – Cost, Insurance & Freight**

The term "CIF" or "Cost, Insurance, and Freight" means that the seller's responsibility is to get the goods on board the vessel or ensure they are already on board. Once the goods are on the ship, the risk of any loss or damage shifts from the seller to the buyer. The seller also must arrange and pay for the transportation costs to get the goods to the agreed port of destination. Additionally, the seller must provide insurance coverage against the risk of loss or damage to the goods during transit. However, it is important to note that the seller is only required to obtain minimum insurance coverage. If the buyer wants more comprehensive insurance, they will need to either negotiate this with the seller or arrange for additional coverage themselves. This term, defined by the International Chamber of Commerce (ICC) in 2010, clarifies that while the seller handles the ship-

ping and basic insurance, the buyer takes on the risk once the goods are loaded and can choose to extend their insurance if needed.

### **CPT – Carriage paid To**

The term "CPT" or "Carriage Paid To" means that the seller's responsibility is to deliver the goods to the carrier, or another person nominated by the seller at an agreed location. The seller also must arrange and pay for the transportation costs to get the goods to the named place of destination. However, it is important to note that while the seller handles and pays for the main transportation, the risk and responsibility for the goods transfer to the buyer once the goods are handed over to the carrier. Additionally, the seller is not required to insure the goods during the pre-carriage and main carriage. The buyer is responsible for any further procedures and can arrange for additional insurance if needed. This term, defined by the International Chamber of Commerce (ICC) in 2010, helps clarify the division of responsibilities and risks between the seller and the buyer, ensuring both parties understand their roles in the shipping process.

### **CIP – Carriage and Insurance Paid to**

Under the term "CIP" or "Carriage and Insurance Paid to," the seller delivers the goods to the carrier they designate and pays the necessary transportation costs to bring the goods to the specified destination. This means that the buyer bears all risks and additional costs that may arise after the goods have been delivered as described. However, under CIP terms, the seller must also purchase insurance to protect the buyer against risks of loss or damage to the goods during transportation. Therefore, the seller will sign the insurance contract and pay the insurance premium. In cases where carriers are contracted to transport goods to the agreed destination, such as with VIN-AFREIGHT, the risk transfer of the goods will be handed over to the first carrier of many, or if it involves multimodal transport that needs to be involved by multiple freight forwarder.

### **DPU – Delivered at Place Unloaded**

"DPU" or "Delivered at Place Unloaded" means that the seller is responsible for delivering the goods to the agreed destination and unloading them from the arrival means of transport. The seller bears all the risks and costs involved in bringing the goods to the named place and unloading them. However, the buyer is responsible for import customs formalities and any associated costs.

This term, introduced in the Incoterms 2020, is unique because it requires the seller to handle the unloading of the goods.

### **DAP – Delivered at Place**

The term "DAP" or "Delivered at Place" means that the seller's responsibility is to deliver the goods to the buyer at the agreed destination, ready for unloading from the arriving means of transport. The seller bears all the risks involved in transporting the goods to this named place. However, under DAP, the seller is not required to provide insurance for the goods during transit; their main obligation is to ensure the goods reach the agreed destination safely. This term, defined by the International Chamber of Commerce (ICC) in 2020, clarifies that while the seller handles the transportation and bears the associated risks, the buyer is responsible for unloading the goods and can choose to arrange additional insurance if needed.

### **DDP – Delivered Duty Paid**

The term "DDP" or "Delivered Duty Paid" means that the seller's responsibility is to deliver the goods to the buyer at the agreed destination, cleared up for import and ready for unloading from the arriving means of transport. The seller bears all the costs and risks involved in transporting the goods to this destination, including clearing the goods for both export and import, paying for any applicable duties, and handling all customs formalities. This term, defined by the International Chamber of Commerce (ICC) in 2010, places the maximum responsibility on the seller and the minimum on the buyer. However, it is important to note that while the seller must ensure the goods reach the destination and handle all associated costs and risks, they are not required to provide insurance for the goods during transit. The seller's main obligation is to deliver the goods to the agreed place, fully cleared and ready for the buyer to unload.

## **3.2 General overview of freight forwarding**

According to FIATA's standard rules in 2005, freight forwarding services are defined as any type of service related to the transportation, consolidation, storage, handling, packaging, or distribution of goods, as well as related consulting services, customs matters, financial issues, insurance procurement, payment, and collection of documents related to the goods. Freight forwarders can provide services directly or through agents and outsource third-party services (Farrington et al.,

2020). In summary, freight forwarding encompasses a set of activities and procedures involving the use of various means and tools to move goods from the sender to the customer.

The characteristic of freight forwarding is that it does not directly create physical products but facilitates the movement of goods across space and time quickly, safely, and economically. As Schramm H. in 2012 stated, a freight forwarder is always considered as “the Architect of Transport”, in a way to prove that they need to have some “specialized knowledge” to manage to do the right job. Freight forwarding activities are very passive as they depend on customer demand, carrier regulations, legal constraints, customs of the countries involved, seasonality of goods production, and the capacity and infrastructure of the shipping company. Despite these dependencies, freight forwarding is increasingly chosen and has become an efficient method of transporting goods due to its superior advantages such as large volume transport, low cost, good quality, and high reliability, making it the preferred choice for many customers.

In Vietnam, maritime freight services have long been a key component of the transportation industry, playing a significant role in promoting the continuous development of international trade activities.

### **3.2.1 Principles of delivery of goods at seaports**

The import and export freight forwarding must be based on international laws and the laws of the host country. The handling of goods at seaports must be carried out by the port based on a contract between the shipper and the party authorized by the shipper with the port. For goods that do not pass through the port (not stored at the port), the shipper or the party authorized by the shipper can directly handle the goods with the carrier.

The loading and unloading of goods within the port's scope will be organized by the port. When authorized to handle goods with the ship, the port must deliver the goods in the same manner as they were received. The port is not responsible for the goods once they have left the port area.

When receiving goods at the port, the shipper or the authorized party must present valid documents proving the right to receive the goods and must continuously receive the goods listed on

the documents within a specified period. The handling of goods can be done by the port as authorized or directly by the shipper.

### **3.2.2 Shipping documents**

Freight forwarding documents are a collection of important papers in international trade activities, used to display information related to the characteristics, value, origin, quality, and quantity of goods in transactions. These documents serve as the legal basis for carrying out payment, transportation, customs clearance, and resolving commercial disputes. The documents include:

- **Import-export contract:** This document outlines the terms and conditions agreed upon by the buyer and seller, including the description of goods, payment terms, delivery schedules, and other essential details.
- **Certificate of Origin (C/O):** This certifies the country where the goods were produced or manufactured, which is important for customs and tariff purposes.
- **Commercial invoice:** This is a bill for the goods from the seller to the buyer, detailing the price, quantity, and description of the goods.
- **Packing list:** This document lists the contents of each package, including the weight, dimensions, and type of goods, helping in the verification and handling process.
- **Quality certificate:** This certifies that the goods meet the specified quality standards and requirements.
- **Quantity/weight certificate:** This verifies the quantity and weight of the goods being shipped, ensuring accuracy in the transaction.
- **Cargo insurance documents:** These provide coverage for the goods against potential risks during transportation, such as damage or loss.

### **3.2.3 Parties Involved in Freight Forwarding Activities**

To complete a comprehensive import-export cycle, coordination among various departments and parties is required, including:

#### **Exporter:**

The exporter plays the role of providing goods and services for export to foreign markets. The exporter performs key tasks such as negotiating and signing foreign trade contracts, preparing goods in the correct quantity, type, and quality as per the signed contract for export, preparing and issuing documents related to the export process, handling export customs clearance procedures, and paying necessary export taxes and fees.

#### **Importer:**

The importer is responsible for purchasing and receiving goods and services from abroad. Their main roles include negotiating and signing foreign trade contracts with the exporter, handling customs clearance procedures for imported goods, paying necessary import-export taxes and fees, making payments to the exporter as per the signed contract, and receiving the import documents and goods.

#### **Carrier/Transport Company:**

The carrier/transport company acts as an intermediary, transporting goods from the exporter to the importer. They plan and book shipments for import-export goods.

#### **Customs Authorities:**

Customs authorities are responsible for managing and supervising the import and export of goods across national borders. The customs structure includes the general department, departments,

and customs branches. Their main tasks are to inspect and supervise import-export goods, clear goods through customs, apply HS codes to collect import-export taxes and related fees, and ensure compliance with import-export regulations.

**Banks:**

Banks serve as financial intermediaries in international transactions. They handle international payment transactions in import-export activities, check and verify import-export documents for payment processing.

**Insurance Companies:**

Insurance companies are involved mitigate risks in the import-export process by providing insurance for goods during transportation and compensating for damages if risks occur.

**Express Companies:**

Express companies handle the exchange of documents between exporters, importers, forwarders, shipping companies, and banks.

**Inspection companies:**

Inspection companies are required for certain import-export goods to conduct inspections before import-export, such as quantity and quality inspections. Agricultural products often require fumigation. These companies ensure that goods comply with technical standards as per import-export regulations and contract requirements.

**Port authorities:**

Port authorities manage, supervise, and coordinate activities at seaports and airports, oversee the loading and unloading of goods at ports, and ensure the safety and security of goods and transportation means at the port.

**Dispute resolution authorities:**

Dispute resolution authorities, including courts and arbitration, handle disputes when conflicts arise between parties in import-export transactions.

**3.2.4 Laws and Regulations**

The applicable Vietnam national laws include the Vietnam Civil Code of 2015, the Commercial Law of 2005, and the Maritime Code of 2005. International laws applied are the Visby Protocol of 1986, the Hamburg Convention of 1987, the Hague-Visby Rules (Brussels) of 1979, the Vienna Convention of 1980, the Brussels Convention of 1924, the Hamburg Convention of 1978, and the Hague Convention of 1929

**3.3 Import and export aspect in Vietnam**

The import-export landscape of Vietnam is characterized by robust logistics infrastructure and strategic trade policies. The country boasts a well-developed transportation network, including major ports such as Hai Phong, Ho Chi Minh City, Vung Tau, Khanh Hoa, Quang Ninh, and Dung Quat. The extensive road and rail systems, along with 13 international airports such as Noi Bai International Airport, Tan Son Nhat Airport, Cam Ranh Airport, Da Nang Airport, and Phu Quoc, etc., and modern warehousing facilities, including specialized cold storage, support the safe handling of various types of goods.

Most of Vietnam's import-export activities are conducted via maritime transport. In 2022, Vietnam imported approximately 180 million tons of goods, valued at around \$358 billion, including machinery, electronic equipment, petroleum products, and raw materials for production (WTO Ministry of Industry and Trade, 2024). According to Overvest M. (2024), these figures highlight Vietnam's strong trade performance and its significant role in the global market.

In June 2023, despite overcoming difficulties, Vietnam's trade balance of goods was estimated to have a surplus of \$12.25 billion. (Figure 10)



Figure 10: Total import and export turnover in Vietnam, June 2023 (*Vietnam's National Statistics Office*).

Additionally, Vietnam's participation in numerous free trade agreements facilitates access to international markets, while the increasing focus on sustainability promotes environmentally friendly practices. The combination of these factors makes Vietnam a significant hub for global trade.

### 3.4 FCL Delivery Process by Sea

#### 3.4.1 Overview of FCL Delivery Process

Full Container Load (FCL) is a method of transporting goods in a complete container. In this method, the customer rents an entire container to store their goods, regardless of whether they utilize full capacity; the customer must still pay the container rental fee for the entire shipment. The shipper is responsible for packing and loading the goods, while the receiver is responsible for unloading the goods from the container (Logistics Management Journal, 2023).

Due to the large size and weight of containers, the preferable way for them is to be transported by sea. Therefore, the FCL import process takes place at the destination port for each shipment. Depending on the nature of the goods, the steps in the process may vary, but the basic steps remain the same.

Using Full Container Load (FCL) offers several advantages. It ensures high safety and security, as the goods are packed in a separate container and sealed, protecting them throughout the transportation process (Global Supply Chain Insights, 2023). Since the container only contains goods

from a single customer, there is no division or delay due to handling goods from multiple customers. FCL also provides better control over the goods, allowing the shipper to freely arrange, pack, and position the goods to ensure efficient transportation and avoid damage. Additionally, FCL reduces the risk of damage, as the goods are not in direct contact with other customers' goods, minimizing the possibility of collision or damage during transportation.

However, FCL also has disadvantages. It involves higher costs compared to Less-than-a Container Load (LCL), as the shipper must pay for the entire container rental, even if the goods do not fill the entire space, meaning the container's internal space is not used efficiently. Furthermore, FCL is often not suitable for small shipments or those with low volumes of goods due to higher costs and coordination issues. Managing and coordinating a full container for a small volume of goods can be more complex and unnecessary. LCL provides a more flexible and efficient solution for smaller shipments, allowing the shipper to pay only for the space they need.

### **3.4.2 Explanation of the FCL Delivery Process by Sea in Vietnam**

#### **Step 1: Receive and Check Documents**

After both parties have agreed on the terms, finalized the price, and signed the delivery contract, the customer will send the document specialist a basic set of documents, including the Sales Contract, Packing List, Commercial Invoice, Bill of Lading, along with important information such as the estimated date of the ship's arrival at the port, ship information, and identification number.

#### **Step 2: Obtain Delivery Order (D/O)**

The Delivery Order (D/O) is an important document in the process of receiving imported full container load (FCL) goods, issued by the shipping company (which could be the shipping line or forwarder). It instructs the storage unit at the port to deliver the goods to the designated consignee.

#### **Step 3: Electronic Customs Declaration and Tax Payment**

Customs declaration can be done online simultaneously with obtaining the Delivery Order (D/O) through the ECUS5/VNACCS software of the Vietnam Customs Authority or other authorized software, followed by the tax payment procedures.

#### **Step 4: Register the Declaration at the Port**

After completing step 3, the forwarder prepares and submits a complete set of documents to Customs as required. The Vietnam Customs Authority will review and notify the amount of tax to be paid.

#### **Step 5: Return the Customs Declaration**

Upon completing step 4, the results received include the stamped Customs Declaration and the document inspection result slip.

#### **Step 6: Issue the Container Interchange Receipt (EIR)**

The Container Interchange Receipt (EIR) is a document confirming the condition of the container. It is considered one of the most important documents in import-export activities. The forwarder submits the Delivery Order (D/O) (with the direct delivery stamp from the shipping line) at the Commercial Office at the port, pays the lifting/lowering and container storage fees, and receives the EIR. (Figure 11)

**TỔNG CÔNG TY TÂN CẢNG SÀI GÒN - CẢNG CÁT LÁI**  
**PHIẾU GIAO NHẬN CONTAINER**  
**EQUIPMENT INTERCHANGE RECEIPT**

**Giao container nhập**

Số Đk (No): 37073783  
 Ngày (Date): 21/04/2017 21:35  
 Hạn hết: 07/04/2017 23:59  
 Code No: 004  
 BAT No: 71722

Giao cho Khách hàng (Delivery To):  
 Bill / Booking / Ref: 121e244037  
 Cảng đích (Dest):  
 Tàu / Chuyến: ST BLUE 007S  
 Cảng chuyển tải (Transit):

Container No	Kích cỡ (Sz / Tp)	Chủ KT (Operator)	Seal No	Status	Weight (Tons)	IMDG	UNNO	OH OW / OL	TEMP
SZLU9884034	430	YML	YMZA150893	FULL	12.34			19C	SOM3

Mặt ngoài (Front) Mặt trong (Rear) Mặt bên (Side) Mặt đáy (Bottom)

Ghi chú (Remark):  
 Cooler - Temp: 19C Ventilation: 63CMH - Hư do lỗi của Hãng tàu: Mặt ống thoát nước 1 của VGM - Lamer = 12.9 tấn

Vị trí hạ container - BLOCK :  
 Vị trí ô :  
 Và liên lạc với phương tiện xếp dỡ bằng BAT

Người phát hành (Issuer): Nguyễn Minh Giang  
 Số xe VC: 1C71722  
 Số máy: R13965

**"ĐẾN VỚI TÂN CẢNG - ĐẾN VỚI CHẤT LƯỢNG DỊCH VỤ HÀNG ĐẦU"**

Figure 11: "Equipment Interchange Receipt" Demo Form

### Step 7: Customs Clearance

Submit the following documents: Delivery Order (D/O), Container Interchange Receipt (EIR), Customs Declaration (both original and photocopy), along with the container list to Customs for recording the shipment information in the customs logbook. Customs will stamp the declaration, EIR, and confirm the container list, then return them to the forwarder.

### Step 8: Collect Goods at the Port

Provide the necessary documents to your container driver to collect the goods at the port or Inland Container Depot (ICD).

### Step 9: Return Empty Container to the Shipping Line and Receive Deposit

After the driver returns the empty container, the forwarder will present the documents to the shipping line's agent to process the refund of the container deposit previously paid.

### Step 10: Finalize and Archive Records

After delivering the goods to the customer, the forwarder will archive the documents and send a Debit Note to the customer.

### **3.4.3 Freight Forwarding Activities Factors**

#### **a. Internal factors**

##### **Financial Capacity of the Enterprise:**

With outdated infrastructure and equipment, incomplete and insufficient machinery, the process of freight forwarding can face difficulties and obstacles. However, to build infrastructure and possess modern equipment, enterprises need a substantial amount of investment capital.

##### **Human Resources:**

Today, most logistics activities are digitized and can be performed online, saving time and effort compared to direct execution. However, many stages in freight forwarding are still not suitable for digitization. The workforce serving the freight forwarding industry is relatively large but lacks specialized training and expertise that aligns with practical needs.

##### **Infrastructure, Equipment, Machinery:**

Investing in physical infrastructure is essential, as it helps shorten the freight forwarding time and reduces service costs, thereby attracting more customers.

#### **b. External factors**

##### **Natural Environment:**

Natural factors such as weather, climate, and natural disasters are unavoidable and significant elements that greatly impact freight forwarding. They affect the speed of transportation and the delivery time.

**Political, Social, and Legal Environment:**

The political and social stability of each country is a crucial factor that facilitates the country's development. It also attracts other countries and foreign merchants to engage in trade and cooperation with that country. The legal environment can either promote or hinder freight forwarding activities

**Economic Situation:**

The economic situation strongly influences import-export activities by sea, as consumer spending may be tightened.

**Scientific and Technological Development:**

Advances in science and technology have contributed to improving the quality of international maritime freight forwarding services and reducing operational costs. Software for tracking orders and managing warehouse systems helps forwarders build trust with customers and maintain long-term relationships.

**3.5 Analysis of the Delivery Process of Imported Goods in FCL at VINA FREIGHT****3.5.1 Introduction of VINA FREIGHT company**

VINA FREIGHT is a company operating in the transportation services sector, established on December 10, 1997, in Ho Chi Minh City, Vietnam. Initially, the company's operations were small and focused solely on-air freight services and domestic logistics, with an initial charter capital of 18 billion VND. However, with the determination and enthusiasm of the leadership team, along with a highly skilled, experienced, and dynamic workforce, the company gradually rose to become one of Vietnam's leading logistics companies.



Figure 12: VINAFREIGHT's logo

### 3.5.2 General Information

**Company Name:** VINAFREIGHT Joint Stock Company

**English Name:** VINAFREIGHT Joint Stock Company

**Address:** Ward 2, Tan Binh District, Ho Chi Minh City, Vietnam

**Initial Charter Capital:** 18 billion VND

**Phone:** (+028) 3844 6409

**Website:** [www.vinafreight.com](http://www.vinafreight.com)

**Business License:** No. 0302511219, first issued by the Ho Chi Minh City Department of Planning and Investment on January 14, 2002, and amended for the 18th time on January 2, 2024

**Number of Employees:** 54

**Type of Business:** Services

**Business Sector:** Logistics

### 3.5.3 Management Model

According to VINAFREIGHT's Annual Report, the information about the management model, business organization and management system was shown:

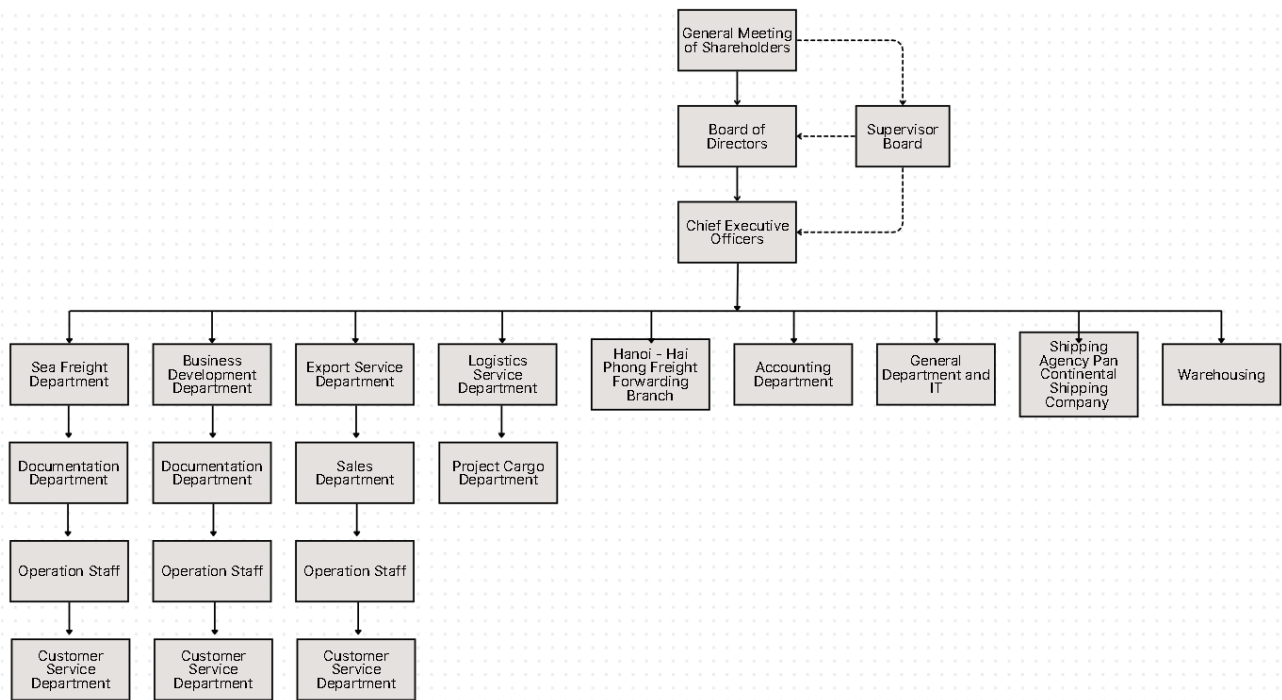


Figure 13: VINAFREIGHT Organizational Structure. VINAFREIGHT Annual Report 2023.

### General Meeting of Shareholders:

The General Meeting of Shareholders is the highest authority of the company, comprising all shareholders with voting rights. It operates through the annual general meeting of shareholders and has the authority to decide on matters as stipulated by law and the company's charter.

### Board of Directors:

The Board of Directors is the managing body of the company, having full authority to act on behalf of the company to decide and perform the company's rights and obligations, except for those rights and obligations that fall under the authority of the General Meeting of Shareholders.

### Supervisory Board:

The Supervisory Board represents the shareholders to oversee the activities and compliance with the law and the company's charter by the Board of Directors and the Executive Board in managing

and operating the company. It is accountable to the law and the General Meeting of Shareholders for the execution of its assigned rights and duties.

### Chief Executive Officer:

The Chief Executive Officer directly manages the company's business operations according to the policies and directions set forth by the General Meeting of Shareholders and the Board of Directors from time to time. The CEO is accountable to the General Meeting of Shareholders and the Board of Directors for the execution of the assigned tasks.

## 3.5.4 Business Performance

### 3.5.4.1 Revenue structure

No	Types of revenue	Net revenue 2022	Proportion	Net revenue 2023	Proportion	% proportion 2023/2022
1	International freight revenue	1,703,517	81.06%	519,350	46.25%	30.49%
2	Airline ticket sales revenue	152,210	7.24%	441,464	39.31%	290.04%
3	Freight forwarding service revenue	200,622	9.55%	129,265	11.51%	64.43%
4	Other service revenue	45,317	2.16%	32,873	2.93%	72.54%
	Total net revenue	2,101,666	100.01%	1,122,952	100.00%	53.43%

Table 1: VINAFREIGHT 2022-2023 Revenue Structure (unit: million VND).

Based on the VINAFREIGHT reports in 2022-2023, it can be assessed that due to a decrease in project cargo volume, especially in medical equipment projects, which are the company's strengths, revenue in this segment has significantly declined. Amid the general economic recession, subsidiaries and operational departments have strived to maintain the highest level of stable operations. The net revenue for 2023 was recorded at VND 1,122,952 million, achieving 53.43% compared to the same period last year. Notably, the proportion of revenue from international freight charges sharply decreased from 81.06% to 46.25% of total net revenue. However, revenue from airline ticket sales increased its share in the total net revenue structure, from 7.24% to 39.31%.

No	Target	2022 Implementation	2023 Plan	2023 Implementation	% 2023 Implementation/Plan
1	Total Revenue	2.10983	955	1.13634	118.98%
2	Pre-tax Profit	3,997	52.4	1,859	35.48%

Table 2: Implementation status compare to the plan 2023 (unit: billion VND)

The reason for this shift is that in 2023, Covid-19 pandemic, geopolitical crises and piracy armed conflicts in the Red Sea region caused freight rates to rise significantly, making it difficult for the operational departments to sell freight services. The Sea Freight Department and the Business Development Department addressed this issue by advising and coordinating with customers to transfer some orders. In 2023, VINAFREIGHT faced numerous challenges and uncertainties from both international political situations and domestic economic difficulties. Despite these challenges, the company still recorded total revenue exceeding the planned target, reaching VND 1,136.34 billion compared to the target of VND 955 billion, equivalent to an 18.98% increase over the planned target, therefore, this is undoubtedly a significant effort by VINAFREIGHT. Pre-tax profit was recorded at VND 18.59 billion, achieving 35.48% of the planned target (Vietnamnet, 2022).

### 3.5.5 Achieved results

According to the official VINAFREIGHT website and reports:

In 2003, the company established its offices in the Vietnam - Singapore Industrial Park (Binh Duong), the Tan Thuan Export Processing Zone, and the Amata Industrial Park (Dong Nai). Additionally, the company established branches in Hanoi and Hai Phong, and an agency office for UASC shipping line. Concurrently, the company invested in the establishment of the Viet Nhat Transport Company.

In 2011, VINAFREIGHT (VNF) shares were officially traded on the Hanoi Stock Exchange (HNX).

In 2015, the company was licensed by the Ministry of Transport to operate multimodal transport services. The license is valid for five years from the date of issuance. On November 6, 2015, the

General Department of Customs issued a license recognizing the company as a customs clearance agent. On November 10, 2015, the company was appointed as the general agent for Pan Continental Ship.

In 2021, VINA FREIGHT issued shares to pay dividends, increasing its charter capital to VND 264,022,010,000.

In 2022, the company issued shares to pay dividends and under the employee stock ownership plan, increasing its charter capital to VND 317,158,800,000 (VINA FREIGHT Annual Report 2023).

Looking at the results achieved, it is evident that VINA FREIGHT has made relentless efforts to achieve significant progress, proving that the company's operational model is on the right track. Although 2023 presented many challenges and revenue decreased significantly over the long journey, VINA FREIGHT has still seen great success. Currently, the company has become one of the top 10 multimodal logistics companies in Vietnam, with a charter capital of 317,158,800,000 VND and four branches operating in Ho Chi Minh City, Hanoi, Da Nang, and Hai Phong.

### 3.5.6 Process of Imported Goods by sea at VINA FREIGHT

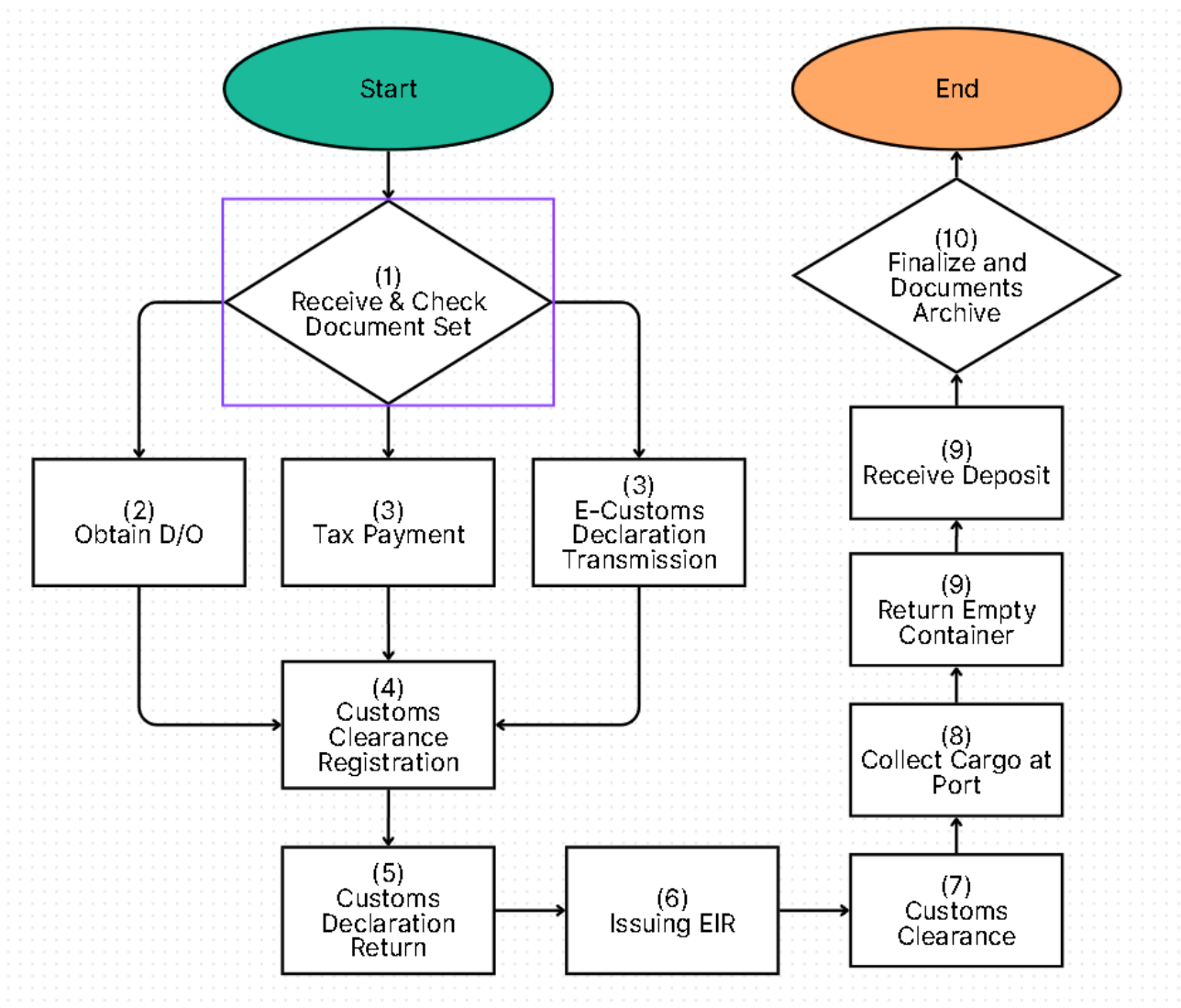


Figure 14: Delivery Process of Goods by Sea at VINA FREIGHT.

#### Steps of the FCL Import Process:

##### Step 1: Receiving and Checking the Document Set

After both parties have agreed on the terms, finalized the price, and signed the delivery contract, the customer will send the VINA FREIGHT delivery specialist a basic set of documents, including the Sales Contract, Packing List, Commercial Invoice, Bill of Lading, along with important information such as the estimated arrival date of the ship and the ship's details. The VINA FREIGHT staff will review and check whether the information across these documents is consistent, ensuring all nec-

essary information is complete and accurate. If any discrepancies or missing information are found, they will promptly contact the customer for adjustments or additions.

### **Step 2: Obtaining the Delivery Order (D/O)**

Approximately 1-2 days before the expected arrival date, the contract delivery staff will receive an Arrival Notice. When the ship arrives at the port, this staff member will bring the complete set of documents and a letter of introduction from the customer's company to the shipping line to obtain the D/O. If it is a connecting order, they must go to the designated forwarding agent to receive the D/O and pay various fees such as the D/O issuance fee, THC fee, container cleaning fee, and handling fee. Depending on the requirements of each shipping line, the delivery staff may need to prepare a container borrowing document and pay a container deposit if required. Additionally, the delivery staff must sign a D/O and submit it to the shipping line for record-keeping as proof that the D/O has been handed over in case of any issues.

### **Step 3: Electronic Customs Declaration and Tax Payment**

The VINAFREIGHT delivery specialist will proceed with the online customs declaration simultaneously with obtaining the D/O. The customs management system will then issue a confirmation, including the receipt number, declaration number, and the status of the goods (green/yellow/red channel). If the Green Channel is notified, the electronic customs declaration is complete. If the yellow channel is notified, additional amendments and checks of the original documents are required. If the red channel is notified, in addition to checking the original documents, a physical inspection is necessary. The VINAFREIGHT delivery staff will receive the import customs declaration, fill in the information, and contact the customer to pay the taxes.

### **Step 4: Registering the Declaration at the Port**

After completing Step 3, the VINAFREIGHT delivery staff must prepare and submit a complete set of documents to Customs, including:

- **Import customs declaration:** This document is a legal requirement that provides detailed information about the goods being imported. It ensures compliance with trade regulations, helps calculate accurate duties and taxes, and facilitates the customs clearance process.
- **Invoice:** It serves as proof of the transaction between the buyer and seller. It includes details such as the value, quantity, and description of the goods, which customs authorities use to assess duties and taxes.
- **Bill of Lading (B/L):** The Bill of Lading is a critical document that acts as a contract of carriage, a receipt for the shipped goods, and a document of title. It provides evidence of shipment and is essential for transferring ownership and facilitating customs clearance.
- **Certificate of Origin (C/O):** This document certifies the country where the goods were produced. It is crucial to determine the applicable tariffs and ensure compliance with trade agreements, which can affect the duties and taxes imposed on the goods.
- **Packing list:** The packing list provides a detailed breakdown of the contents of the shipment, including the quantity, weight, and dimensions of each item. It helps customs officials verify the shipment's contents against the invoice and other documents, ensuring accurate assessment and clearance.
- **Payment receipt to the state budget:** This receipt confirms that all applicable duties, taxes, and fees have been paid to the state. It is necessary for the release of the goods from customs and ensures that the importer has fulfilled all financial obligations.
- **Letter of introduction:** This document is often used to formally introduce the importer or exporter to the customs authorities. It can help facilitate communication and expedite the clearance process by providing necessary contact information and context.
- **Inspection registration (for red channel cases):** For shipments assigned to the red channel, which require detailed inspection, this registration ensures that the goods undergo the

necessary physical and documentary checks. It helps customs authorities manage high-risk shipments and prevent smuggling or fraud.

The customs authority will receive the documents and proceed with the inspection. If there are no irregularities, the documents will be forwarded to the tax calculation department to determine the payable tax amount.

#### **Step 5: Returning the Customs Declaration**

Upon completing step 4, the document set will be stamped and transferred to the customs declaration return counter. The delivery staff must purchase a stamp to affix to the declaration (the stamp is considered a customs fee). The returned document set will include the stamped customs declaration, the document inspection result slip, and, if it is a red channel case, the goods inspection result slip.

#### **Step 6: Issuing the Container Delivery Receipt (EIR)**

The delivery staff submits the D/O (with the shipping line's direct delivery stamp) at the commercial office at the port, pays the lifting/lowering and container storage fees.

#### **Step 7: Customs Clearance**

The delivery staff will bring the document set, including the D/O, EIR slip, customs declaration (both original and photocopy), and the container list, to Customs. This unit will record the shipment information in the customs log, stamp the declaration, EIR slip, and confirm the container list. The documents are then returned to the delivery staff.

#### **Step 8: Collecting Goods at the Port**

The delivery staff must hand over the EIR slip, container list, and container borrowing document to the container driver to collect the goods at the port.

### **Step 9: Returning the Empty Container to the Shipping Line and Receiving the Deposit**

Based on the information on the container borrowing document, after the driver returns the empty container to the port, the delivery staff will bring the EIR slip, container deposit document, and receipt to the shipping line's agent to complete the procedures for reclaiming the container deposit previously paid.

### **Step 10: Finalizing and Archiving the Documents**

After completing the customs clearance and the goods have been delivered to the customer, the documentation staff will carefully check and organize all documents into a complete set for archiving and send a set to the customer along with a Debit Note.

#### **3.5.7 Evaluation of FCL delivery process at VINAFREIGHT**

##### **Advantages:**

The steps in the process are carried out meticulously, with clear and coherent content that provides comprehensive and easily understandable information, enabling the executor to grasp it effortlessly. Thanks to the company's "win-win" business philosophy and a team of young, dynamic, highly qualified, enthusiastic employees who are proficient in using software and knowledgeable about the process, tasks are resolved quickly and smoothly, creating satisfaction and a sense of respect, thereby building customer trust. This has helped retain customers and create a stable source of goods. The company also makes significant investments in infrastructure, equipping itself with various specialized software to handle tasks quickly and accurately.

**Disadvantages:**

The company's warehouse is located in a low-lying area, which, given the recent unusual weather conditions, may be prone to flooding, causing damage to equipment in the workshop and spoiling customers' goods. The air conditioning system in the warehouse does not ensure stable and safe temperatures, creating a risk of damage to customers' goods, and there is no established cycle for inspection and reporting to address this issue. Goods in the warehouse, especially bulky items, are not arranged neatly or scientifically, making it difficult and time-consuming to search, unload, and load, wasting warehouse space and posing a risk of breakage.

Employee skill enhancement training has not been prioritized, mainly relying on self-study or asking colleagues, with three-quarters of the company's employees aged between 30 and 62, and there is no comprehensive training strategy despite this group slower the rapid development of information technology. The idea of introducing AI to employees is also stagnant. Due to ongoing political conflicts in various places such as Russia-Ukraine, the Gaza Strip, and the recent crisis in the Suez Canal, logistics costs have increased.

Despite the efforts of the leadership and individuals to find feasible solutions, the current service prices of VIN-AFREIGHT remain 3-5% higher than companies in the same segment, and this figure may increase further in the future. These disadvantages are truly concerning as they could become bottlenecks in the company's flow in the future if not addressed seriously and thoroughly (VIN-AFREIGHT Accounting Department, 2023).

**3.5.8 Incoterms practice in VINA FREIGHT**

During the interview conducted in this study, information given shows that the trend of choosing Incoterms based on cost and risk of the product. The effective use of Incoterms begins with understanding the risk-releasing point. If the risk-releasing point defined by an Incoterm occurs at an early stage, the company is released from liability. However, when the risk remains with the seller throughout the delivery, the company must cover delays and promptly deliver replacement products in case of damage. Covering damage within a specific timeframe is impractical for the compa-

ny, as it produces specialized products that require months to manufacture. Therefore, early-stage risk release is particularly desirable. If the material is damaged during delivery, the customer is obliged to pay for both the damaged material and the new material.

In reality, many companies continue to conduct their international commerce utilizing Incoterms 1990 or Incoterms 2000 transportation systems. Due to the relatively weak import-export industry in Vietnam in general and VINA FREIGHT businesses in particular, CIF and FOB have become standard business practices. In addition to the time commitment required to break this habit, strengthening one's understanding of Incoterms and international trade law is also essential. Since most firms are small and medium-sized, they are afraid of losing out on sales possibilities and lack the confidence to negotiate contracts. Consequently, altering this unproductive trading strategy is the answer. For those businesses and VINA FREIGHT to confidently pick delivery terms with partners and counsel partners on how to choose Incoterms that are advantageous to both parties, this requires time and training.

This is particularly important in the context of Incoterms, as these terms define the responsibilities and risks for both parties in international trade. By understanding and effectively utilizing Incoterms, the business can better manage transportation costs and liabilities, ensuring smoother and more efficient trade operations.

## **4 Research Results**

Even though the Full Container Load (FCL) delivery process is one of the standard options used by freight forwarding companies worldwide, there are still many suboptimal drawbacks that slow down the delivery process. By understanding the operational aspects of logistics businesses and analyzing Incoterms, one of the many tools to enhance the transportation of goods, freight forwarding companies can maximize efficiency and reduce potential risks, as Gonzalez, J. A. (2025) stated, "risk management is not about eliminating risks, it is about understanding and managing them."

#### **4.1 What are the main challenges in the current FCL delivery process at VINAFREIGHT?**

One of the major challenges for VINAFREIGHT is the high service costs, especially for medium and small shipments, as the container capacity is not fully utilized, leaving much empty space. This inefficiency leads to higher costs for customers who do not have enough goods to fill an entire container, making it less economical for smaller shipments.

The delivery service is affected by infrastructure (warehousing) that has not been adequately invested in, with tin roofs and weak air conditioning systems. With harsh natural conditions in Vietnam, some days being extremely hot, with outdoor temperatures exceeding 50°C, or heavy rains can cause flooding in the workshop and damage goods. The equipment system sometimes causes system errors, causing difficulties and delays. The lack of investment in modern infrastructure and technology hampers the efficiency and reliability of the service, leading to potential damage to goods and increased operational costs.

The workforce handling the FCL delivery process is highly experienced and skilled, but their information technology proficiency and application of AI in their work are still weak, potentially prolonging the time and increasing costs. Despite their expertise in logistics, the lack of advanced technological skills means that processes are not optimized, leading to inefficiencies and higher operational costs. Training programs to enhance IT skills and AI applications are necessary to improve productivity and reduce costs.

The delivery operations are not yet optimized in terms of time, and the coordination between the delivery department and the trucking department is not yet tight, leading to occasional delays in delivering goods to customers, affecting the company's reputation. Effective coordination and communication between departments are crucial for timely deliveries and maintaining customer satisfaction. Investing in integrated logistics management systems could help streamline operations and improve delivery times.

Additionally, VINAFREIGHT faces challenges due to ongoing political conflicts in various places such as Russia-Ukraine, the Gaza Strip, and the recent crisis in the Suez Canal, which have led to in-

creased logistics costs. These geopolitical issues impact global supply chains, causing fluctuations in shipping rates and availability, further complicating logistics planning and cost management.

Despite the efforts of the leadership and individuals to find feasible solutions, the current service prices of VINAFREIGHT remain 3-5% higher than companies in the same segment, and this figure may increase further in the future. These disadvantages are truly concerning as they could become bottlenecks in the company's flow in the future if not addressed seriously and thoroughly (VINAFREIGHT Financial Report, 2023). Addressing these issues through strategic investments in infrastructure, technology, and workforce training, as well as improving coordination and communication, is essential for maintaining competitiveness and ensuring long-term success.

#### **4.2 How do Incoterms affect the efficiency of the FCL delivery process?**

Recognized worldwide, Incoterms provide legal transparency between shipping companies from different countries, helping navigate various legal systems and trade practices. After both qualitative and quantitative methods of interviewing and surveying VINAFREIGHT employees, Incoterms were identified as key to international transactions. However, some freight forwarding companies tend to be indifferent to them. Based on advantages such as providing a standardized framework that defines the responsibilities of buyers and sellers, Incoterms help with accurate budgeting and risk management, which is crucial for maintaining efficient operations. Clear definitions of responsibilities help minimize disputes between trade partners, specifying who is responsible for various aspects of the shipping process, such as transportation, insurance, and customs procedures.

In practice, the risk of delay also passes at delivery (Railas L., 2023). Additionally, Incoterms detail the procedures to be followed during transportation, including documentation requirements and regulatory compliance, ensuring a smoother and more efficient shipping process, directly applicable to VINAFREIGHT's business. By providing a common framework, Incoterms facilitate negotiation, contract signing, and the development of international trade, making it easier for businesses to engage in cross-border transactions.

### 4.3 What strategies can be implemented to optimize the FCL delivery process at VINAFREIGHT?

VINAFREIGHT's workflow is comprehensive and efficient, thanks to their efforts in receiving and delivering imported FCL goods by sea. However, several issues slow down the receiving and delivery process, affecting the favorable and challenging circumstances of the process, thereby impacting the quality of work. To address these issues, several remedial measures are being proposed to help the business streamline its processes.

Based on the above analysis, several solutions are proposed to further improve the goods delivery process at VINAFREIGHT and enhance the company's competitiveness:

**Solution 1:** Invest in human resource development.

Firstly, investing in human resource development is crucial. Employees at VINAFREIGHT face difficulties when handling new types of products, such as applying HS codes, customs declarations, and tax incentives. This indicates a need for better training and development to enhance their adaptability and skills.

During the operation of the FCL cargo handling process, there have been continuous errors in document verification, leading to delays and additional costs. Although the workforce is young, skilled, and experienced, they lack the ability to handle new situations, have low awareness of updating new government regulations, and have limited ability to apply information technology in daily work to improve work efficiency and save time.

In the rapidly developing era of Industry 4.0, VINAFREIGHT's leadership cannot remain outside this whirlwind if they want to manage the business well. In reality, some company leaders still perform tasks manually and have not applied information technology to their work, especially the application of AI, which few have implemented. As Ashton Q. (2012) mentioned that "the use of computer and IT in their daily work will translate into changed ways of doing business". This will reduce the company's agility and competitiveness in the future.

By developing a strong training and implementation strategy, VINA FREIGHT can address these issues.

**Solution 2:** Invest in researching service pricing and minimizing costs.

Errors in document verification led to additional costs and delays, highlighting the need for more efficient processes. By researching and implementing better methods, VINA FREIGHT can minimize these costs. The shortage of empty containers is also a significant issue, resulting in increased costs for renting empty containers, raising service prices, and prolonging processing time, which can lead to delivery delays. Exploring alternative solutions or optimizing current processes can help mitigate these problems.

Furthermore, understanding and effectively using Incoterms can support better cost and risk management. Training employees in negotiation and signing principal contracts is a way to improve the situation. By equipping staff with the skills to negotiate and finalize key contracts, VINA FREIGHT can enhance its operational efficiency and reduce costs.

**Solution 3:** Invest in upgrading the company's infrastructure.

Finally, investing in upgrading the company's infrastructure is necessary. The shortage of containers and congestion at seaports, along with a warehouse system that does not adequately meet the needs of cargo handling and poses many risks, highlight the need for better infrastructure. Some system management equipment is also outdated and prone to malfunctions. These issues underscore the importance of improved infrastructure.

Upgrading infrastructure offers numerous benefits, including enhanced efficiency and performance, reduced operational costs, and improved service quality. Ahmed A. (2025) emphasized that by upgrading infrastructure, it enables systems to “adapt quickly to changing business needs and workload demands, optimizing resource utilization and reducing waste.” Modern infrastructure enables VINA FREIGHT to handle larger volumes of goods more effectively, meet customer demands promptly, and maintain high standards of safety and security. Additionally, infrastructure

improvements can also lead to job creation and economic growth, as better logistics capabilities attract more business and investment.

## **5 Recommendation for Freight Forwarders**

The application of Incoterms can significantly enhance the efficiency and effectiveness of the Full Container Load (FCL) delivery process. By clearly defining the responsibilities, costs, and risks associated with international shipping, Incoterms provide a standardized framework that facilitates smoother transactions and reduces the potential for disputes. This chapter outlines key recommendations for leveraging Incoterms to optimize the FCL delivery process.

### **5.1 Select the Appropriate Incoterms**

It is crucial for companies to have a comprehensive understanding of the responsibilities, costs, and risks associated with each of the 11 Incoterms 2020. For instance, FOB (Free on Board) places the responsibility on the seller until the goods are loaded onto the shipping vessel, while CIF (Cost, Insurance, and Freight) includes the cost of insurance and freight to the destination port. Selecting the appropriate Incoterm based on the specific needs and capabilities of the business can significantly impact the efficiency of the FCL delivery process. Careful consideration can help exporters and importers select the most suitable Incoterms that align with their specific trade transaction requirements and objectives (Export Import Management, 2005).

Companies should select Incoterms that align with their operational capabilities and risk tolerance. For example, businesses with strong logistics capabilities might prefer EXW (Ex Works), where the buyer assumes most responsibilities, while those looking to minimize their risk might opt for DDP (Delivered Duty Paid), where the seller takes on more responsibilities. As noted by Amilo.co, "Proper use of Incoterms can enhance shipping efficiency, reduce costs, and minimize disputes, making them indispensable for freight forwarders, logistics teams, and exporters." Especially for new investors, Incoterms that increase the seller's accountability while lowering the buyer's complexity and risk are frequently advantageous for them. To make it easier for the customer to acquire the items without worrying about logistics, DDP, for instance, guarantees that the seller manages every part of delivery, including customs clearance and duty payment. Initially, the act of analyzing the cost distribution can help businesses choose Incoterms that align with their financial

strategies and budget constraints, as well as enhance their competitive advantage and build stronger relationships with trading partners. "Incoterms allow freight forwarders to plan, communicate, and execute shipments with transparency and efficiency. They are essential tools in an increasingly complex global market" (Trade Financial Global, 2025)

## 5.2 Enhance Communication and Coordination

In any industry, it is important for the business to build rapport widely for potential growth, more so creating your place at the table. Understand the principle of growth, however, Vietnamese companies are still facing multiple challenges regarding the communication with bigger scale business. Ly-Le, T. M. (2015) stated that Vietnamese businesses often face "challenges in negotiations due to their relatively weaker negotiating position compared to their international counterparts". Professional importers and exporters, however, are fully aware of the unique advantages of each Incoterms trading environment, so both buyers and sellers want to benefit their companies and nations. A recent meta-analytic review by Rothmann et al. (2021), shows that coordination was "unequivocally critical to effective performance." To enhance communication, making sure that all parties involved understand their responsibilities as defined by the chosen Incoterm is essential. This includes clear documentation of who is responsible for tasks such as transportation, insurance, and customs clearance. Clear contractual agreements help prevent misunderstandings and ensure that each party fulfills its obligations. Regular updates and proactive issue resolution in contracts can prevent misunderstandings and ensure smooth transactions and it can serve as a legal safeguard and a clear guide for all parties involved.

To do that, providing regular training for logistics and sales teams on the latest Incoterms and their implications is vital. This training helps prevent misunderstandings and ensures that all team members are aware of their responsibilities and the potential risks involved and empowers staff to make informed decisions and communicate effectively with clients and partners. Being able to give clients timely information on the status of their shipments promotes positive working relationships. Responses that are prompt and precise may have a significant impact on customer loyalty and satisfaction. Businesses are adopting more efficient mechanical tools for transportation because of technological advancements. The logistics chain's operational efficiency, transparency,

and teamwork are enhanced using modern technology and platforms. These days, shipments are tracked from point of origin to point of destination using real-time tracking systems driven by GPS and a lot of IoT devices. As a result, all Incoterms agreements will be embedded into those digital platforms, making it easier for every step of the delivery. Cargo freight forwarders may increase customer trust and reliability in comprehensive communications by using digital platforms to give them precise updates at every stage of the process. Transparency and traceability may be improved by managing and tracking shipments using digital platforms and software. By ensuring that all parties follow the established Incoterms, technologies like blockchain can provide a safe and transparent record of transactions. Automation has become a cornerstone of modern logistics operations and in 2025, with artificial intelligence and machine learning, implementing systems that automate the generation and sharing of necessary part of shipping, namely as predict delays, optimize routes, and documents, can reduce errors and speed up the process. Automated technology ensures that all processes are completed accurately and efficiently.

The company must also conduct regular customer surveys to assess whether its current quality levels meet customer needs effectively and to gather feedback on improving areas that require enhancement. Additionally, organizing bi-monthly meetings between direct employees and customers to report on issues encountered during the previous working period serves as a reminder to avoid production mistakes. These meetings also provide an opportunity for employees to share problem-solving strategies and learn from each other to develop effective solutions.

To sum up, improving coordination and communication when selecting Incoterms requires a thorough strategy that includes frequent training, unambiguous communication, group decision-making, technological solutions, frequent meetings, thorough documentation, and attentive customer support. Freight forwarders may streamline their operations, cut expenses, and minimize conflicts by carefully evaluating and putting these strategies into practice. This will help to make international trade operations more dependable and seamless. Incoterms is a tool that enables freight forwarders to plan, communicate, and execute shipments with transparency and efficiency, thus when a global economy that is becoming more complicated, they are indispensable for freight forwarding businesses to succeed and expand in the cutthroat global economy.

### 5.3 Risk Management

Depending on the chosen Incoterm, it is essential to ensure adequate insurance coverage is in place. For example, under CIF, the seller must provide insurance, but the buyer should verify that the coverage is sufficient to protect their interests. Thus, all document verification processes must be detailed, and thorough, as even minor errors can lead to profound consequences. Common errors include incorrect information about goods, incorrect HS code attachment, and insufficient information regarding transit goods, which can result in customs clearance issues. Therefore, the document verification process must involve coordination among the sales, document, and delivery departments. When the sales department receives information from customers, it is transferred to the document department to prepare the necessary documents. These documents are then sent back to the sales department for customer confirmation before being forwarded to the delivery department.

Developing contingency plans for potential disruptions is crucial. As Evans E. (2025) said, “no matter how thorough the market analysis, unforeseen events can disrupt even the most carefully laid plans.” It is imperative that every personnel individual possesses high professional qualifications to leverage practical benefits. The company must prioritize the training of human resources to enhance both professional expertise and soft skills. Professional competence entails proficiency in professional skills, ensuring no errors occur at any stage of the delivery process. Soft skills encompass effective communication, customer persuasion, agile office computer skills, teamwork, and problem-solving abilities. Human resource training programs must be implemented regularly and systematically. This includes understanding the risks associated with different Incoterms and preparing for scenarios such as delays, damage, or loss of goods. Effective risk management strategies can mitigate the impact of unforeseen events on the FCL delivery process.

### 5.4 Cost Optimization

Conducting a cost-benefit analysis to determine the most cost-effective Incoterm for each shipment is essential. The cost-benefit analysis has been “widely appreciated in economics, particularly in sectors which requires assessments of large-scale investments like transportation and logis-

tics” (Thomas et al, 2019). This analysis should consider factors such as transportation costs, insurance, and potential risks. By carefully evaluating these factors, companies can select the Incoterm that offers the best balance of cost and risk. To enhance customer satisfaction regarding cost-saving criteria, the company needs to adjust and review its pricing. To achieve competitive pricing, the company should increase the volume of transported goods by expanding its market operations and scaling up the business department. This includes securing diverse contracts for various goods and developing comprehensive services in international freight forwarding, particularly for imports. The company should selectively seek additional suppliers and transportation providers with reasonable pricing, negotiating lower rates by committing to a certain volume of goods daily. Establishing long-term deposits with shipping lines can eliminate the need to pay container deposits for each shipment, facilitating quicker operations and reducing refund processes (Office of the Federal Register, 2013).

In addition to offering extended payment terms, the company should emphasize the payment conditions and obligations in service contracts. Negotiating terms with suppliers and logistics providers can help optimize costs. For example, companies might negotiate better rates for freight or insurance under certain Incoterms, leading to significant cost savings. Specific regulations on service fee payment deadlines and provisional interest rates for overdue payments should be established. This interest rate can be calculated based on the order value, the delay period, and a percentage (suggested rate of 5-7% per month).

Reducing needless expenses will help the business make more money. As a result, the business must clearly and transparently identify the source of its revenue and expenses. By storing and updating files on an electronic system, the business may reduce the expenses associated with utilizing documents and printing them into paper files. Employees will be able to save time and space at work, store more data for longer periods of time, and find it more simply. Additionally, if employing external services is less expensive than doing it internally, the business may be flexible in using them. This will allow the business to spend capital more freely and save a lot of money.

## 5.5 Compliance and Legal Considerations

When incorporating Incoterms into imported contracts with FCL delivery processes, freight forwarders must navigate a complex landscape of compliance and legal considerations to ensure smooth and efficient operations. By keeping abreast of international trade regulations and ensuring that the use of Incoterms complies with these rules, it will not only minimize risks and maintain regulatory adherence but also enhances customer satisfaction and fosters long-term business relationships. This includes staying informed about customs regulations and import/export laws that may impact the FCL delivery process, while having legal experts review contracts to ensure that the chosen Incoterms are correctly applied and that all legal obligations are met is crucial. This review helps prevent legal disputes and ensures that all parties are protected. As the global trade environment continues to evolve, staying informed about the latest developments in Incoterms and related regulations will be crucial for freight forwarders to remain competitive and successful in the industry.

As of October 2024, Vietnam has signed 17 Free Trade Agreements (FTAs). Successful negotiations and agreements with key trading partners such as ASEAN, China, South Korea, Japan, and India promise to bring numerous opportunities and diversify export and import markets. By removing or lowering import quotas, tariffs, and other trade restrictions, these agreements aim to promote more efficient and seamless trade flows. By doing this, the government hopes to expand Vietnamese products' access to markets, diversify export markets, and draw in foreign capital. Additionally, FTAs force Vietnam to strengthen its legal and regulatory systems, which improves the business environment. However, while the government provides the framework and opportunities through these FTAs, the ultimate success in leveraging these agreements lies in the hands of Vietnamese businesses. Businesses need to proactively adjust to the new market conditions and FTA-imposed rules. Stronger international alliances, more exports, and an enlarged market presence can result from the efficient use of FTAs. Vietnamese businesses may make a substantial contribution to the country's economic growth and international trade integration by embracing the difficulties and changes presented by free trade agreements.

## 5.6 Continuous Improvement

For VINAFREIGHT's export operations, a standard flow must be created. Because they clearly outline precise activities to finish the task, demonstrate how the process functions, and illustrate how each phase fits together, the diagrams are simple to grasp. Additionally, it assists staff members in identifying areas for improvement. Each employee can concentrate more on the stages they oversee and not become overwhelmed by the process due to the way information is sent step by step. Thus, regularly monitoring the performance of the FCL delivery process and evaluating the effectiveness of the chosen Incoterms is essential. Using key performance indicators (KPIs) to measure efficiency, cost, and risk management can help identify areas for improvement. Parmenter D. (2015) stated that "successful performance improvement requires empowerment of the organization's employees". To easily measure, establishing a feedback loop with all stakeholders to identify areas for improvement is crucial. This feedback can help refine the Incoterm strategy and enhance overall efficiency, ensuring that the FCL delivery process continues to meet the evolving needs of the business.

## 6 Discussion

VINAFREIGHT's purpose of the case study aims to help the employees in their work case and guide the traineeship program in the future. With the expectation of having highly skilled employees, investments for this case study should be made occasionally for a better learning experience.

The content of the thesis presented detailed information about the FCL delivery process at VINAFREIGHT and pointed out challenges a freight forwarder must deal with in working life. It is important to understand the process as a whole and follow a strict principle of work to optimize it spontaneously. The thesis also covered information about Incoterms and how businesses in the logistics industry could apply those terms in a commercial contract for a better result and risk-free. The analysis makes sure that with those tools and knowledge about delivery process, business can enhance efficiency on smooth transport, contract deals, cost-reductions and risk-free while freight forwarding.

The research questions mentioned in the thesis, such as “What are the main challenges in the current FCL delivery process at VINAFREIGHT?”, “how do Incoterms affect the efficiency of the FCL delivery process?”, and “what strategies can be implemented to optimize the FCL delivery process at VINAFREIGHT?”. These questions were fully answered in the research result.

VINAFREIGHT, a freight forwarding company, planned to optimize the delivery process of imported goods by sea, using the latest Incoterms 2020. Seeing the need to update the delivery process and the international commercial terms, VINAFREIGHT decided to discuss the case study, which leads to this thesis. It is important to understand that the selection of the suitable Incoterms depends on the case company. The thesis conducted qualitative and quantitative methods to help understand the situation of the case company and Incoterms, using surveys, interviews and case company's records. In the survey, quantitative results were conducted to have better understanding of the workflow at the company and analyze any differences and changes. A simple interview with three logistics professionals was also conducted to understand the in-depth operation status and knowledge. The results were comprehensive, and the information given by the logistics managers was gathered and used correctly based on factual events and statistics of the case company. The research result was mentioned thoroughly in the content of the thesis.

VINAFREIGHT's purpose of the case study aims to help the employees in their work case and guide the traineeship program in the future. With the expectation of having highly skilled employees, investments for this case study should be made occasionally for a better learning experience.

## **7 Conclusion**

Vietnam is a developing country that is actively pursuing an open economic policy to strengthen international trade. Vietnam also has an extremely advantageous geographical position for transshipping goods globally from Europe to Asia and vice versa by sea, making it an excellent environment for the logistics industry in general and the FCL cargo transportation sector in particular to thrive. Along with Vietnam's preferential tariff policies and infrastructure development, logistics companies in Vietnam have rapidly developed and are increasingly perfecting the closed-loop supply chain alongside continuous reforms.

The thesis provided thorough information about the FCL delivery process at a freight forwarding company's perspective – VINAFREIGHT. Through analysis and research, optimization opinions were given using Incoterms to boost performance. The research covered the connection between FCL delivery process and Incoterms and pointed out how it becomes the binder for every delivery, making a big difference in the delivery process. The case company had a good way of operating FCL process already but needed to make better adjustments to optimize the workflow. The Incoterms selection habits of freight forwarders like VINAFREIGHT also mentioned in the research, "import FOB export CIF" more so became one of the most used terms which leads to uncontrollable risk-free causes. The effective use of every Incoterms will undoubtedly enhance the efficiency of the FCL delivery process, training personnels to have more experiences in the logistics process, ensuring compliance with international trade regulations and reducing delays caused by documentation errors or regulatory issues.

The thesis presented not just professional information about the latest Incoterms, but also optimized FCL delivery process in the case company with an outcome to help people understand the importance of optimizing the import freight forwarding process as well as strengthening and developing delivery activities. The case company has been working hard in recent years to market its service business operations to support global import and export activities. The case company must determine precise responses, directions, and comprehensive strategies for every phase of the delivery process and coordinate their implementation in the most efficient manner if they hope to have steady and sustainable development in the future. To accomplish the suggested short-term and long-term outcomes, the company should employ the development strategies outlined in the analysis section. As a writer and an intern at the case company, the author gained many useful insights and knowledge of the freight forwarding activities and international commercial contracts, making it to be an advantage for later career.

With the hope of providing insights and proposals to optimize the FCL delivery process at VINAFREIGHT, the company can identify and proactively address certain risks, ensuring safe and sustainable growth. This contributes to the overall development of Vietnam's logistics industry, facilitating a stronger flow of the country's production and supply chain to the world, and ultimately bringing a better life to society.

## References

Brodie, P. (2014). *Commercial Shipping Handbook* (3rd ed.). Informa Law from Routledge.

<https://doi.org/10.4324/9781315774695>

Cassell, C., Cassell, C. (2015). *Conducting Research Interviews for Business and Management Students*. United Kingdom: SAGE Publications.

Chan, F., Ng, J. & Tai, S. (2015). 5. Freight Forwarding Law. In *Shipping and Logistics Law: Principles and Practice in Hong Kong, Second Edition* (pp. 105-144). Hong Kong: Hong Kong University Press.

<https://doi.org/10.1515/9789888876488-011>

Citrus Freight. (2023, December 26). FCL shipping: Shipping process, containers, and rates. <https://www.citrusfreight.com>

Code of Federal Regulations, Title 46, Shipping, PT. 200-499, Revised as of October 1, 2013. (2014). United States: U.S. Government Printing Office.

Container-xChange. (2022, September 19). *Full container load (FCL)*. <https://www.container-xchange.com/glossary/full-container-load/>

Contracts Between Freight Forwarders and Railroads: Hearings, Ninetieth Congress, Second Session, on S. 3714 ... Sept. 9, 10, and 11, 1968. (1968). United States: U.S. Government Printing Office.

Cook, T. A., Alston, R., & Raia, K. (2012). *Mastering Import & Export Management*. AMACOM.

Deep Learning Innovations for Securing Critical Infrastructures: IGI Global.

Edwards, J. E. (1997). *How To Conduct Organizational Surveys: A Step-by-Step Guide*. India: SAGE Publications.

Ethan E. *Maximizing Resources*. (2025). Norway: Publifye AS.

Farrington, B., Lysons, K. (2020). *Procurement and Supply Chain Management*. United Kingdom: Pearson.

Freightos. (2021, October 16). *FCL shipping: Definition, containers, prices & more*. <https://www.freightos.com>

Gonzalez, J. A. (2025, April 21). *Want to Mitigate Tariff Impacts? Start by Looking at incoterms*. <https://www.adamsandreese.com/insights/how-incoterms-can-help-mitigate-tariff-impacts>

Global Supply Chain Insights. (2023). *End-to-End Logistics Solutions*. International Chamber of Commerce. (2017, January 5). *The Incoterms® rules 2010*. <https://www.iccwbo.org>

International Federation of Freight Forwarders Association. About Freight-Forwarding.

<https://fiata.org/about-freight-forwarding/>

International Trade Review. (2022). Specialized Containers in Logistics.

Kaynak, E., Seyoum, B. (2014). Export-Import Theory, Practices, and Procedures. United Kingdom: Taylor & Francis.

Lee, B., Saunders, M. N. K. (2017). Conducting Case Study Research for Business and Management Students. United Kingdom: SAGE Publications.

Logistics Management Journal. (2023). Container Sizes and Standardization.

Ly-Le, Tuong-Minh, Business Negotiations between American and Vietnamese Businesses: The Influence of Proxemics and Site Setting on Negotiation Outcomes (2015). Ly-Le, T. M. (2015).

<https://ssrn.com/abstract=2642522>

Maersk. (2023, December 15). *What is FCL?* <https://www.maersk.com>

Marine Policy and Economics. (2010). Elsevier Science.

McDowell, C. E., Gibbs, H. M. (1999). Ocean Transportation. United States: Beard Books.

Ministry of Industry and Trade. (2023). Vietnam Import-Export Report 2023.

Nicholas, J. M., & Steyn, H. (2012). Project Management for Engineering, Business, and Technology. Taylor & Francis.

Overvest, M. (2024). Vietnam Import and Export Statistics: 16 Key Figures of 2024.

Parmenter, D. (2015). Key Performance Indicators: Developing, Implementing, and Using Winning KPIs. United Kingdom: Wiley.

Railas, L. (2023). *Incoterms 2020 Handbook: Effecting Deliveries in Challenging Times*. Netherlands: Wolters Kluwer.

Rowbotham, M. (2014). *Introduction to Marine Cargo Management (2nd ed.)*. Informa Law from Routledge. <https://doi.org/10.4324/9781315814018>

Schramm, H. (2012). *Freight Forwarder's Intermediary Role in Multimodal Transport Chains: A Social Network Approach*. Germany: Physica-Verlag HD.

Segal, T. (2024) *Incoterms: Definition, Examples, Rules, Pros & Cons*. Investopedia.

Sinha, A. (2023). FCL (Full Container Load) vs. LCL (Less than Container Load): Cost-effectiveness and considerations. *Journal of Logistics and Transportation*, 15(3), 45-58.

Song, D. (2021). *Container Logistics and Maritime Transport*. Taylor & Francis.

Thomas, V., Chindarkar, N. (2019). *Economic Evaluation of Sustainable Development*. Germany: Springer Nature Singapore.

Total import and export turnover in Vietnam (2023). *Vietnam's National Statistics Office*. <https://www.gso.gov.vn/en/data-and-statistics/2023/07/overcoming-difficulties-vietnam-has-a-trade-surplus-of-12-25-billion-usd-in-6-months-of-2023/>

Trade Finance Global. *Choosing the Right incoterms, 07/2025*. <https://www.tradefinanceglobal.com/incoterms/choosing-the-right-incoterm/>

Transport & Logistic Glossary. (2017). maier sorin.

UPS Supply Chain Solutions. *What is freight forwarding?* <https://www.ups.com/us/en/supplychain/freight>

Vietnam Enterprise Law No. 59/2020/QH14. <https://lawnet.vn/vb/Luat-Doanh-nghiep-so-59-2020-QH14-68525.html>

Consulate of the Socialist Republic of Vietnam. <https://www.vietnamconsulate-ny.org/about/1/about-vietnam.html>

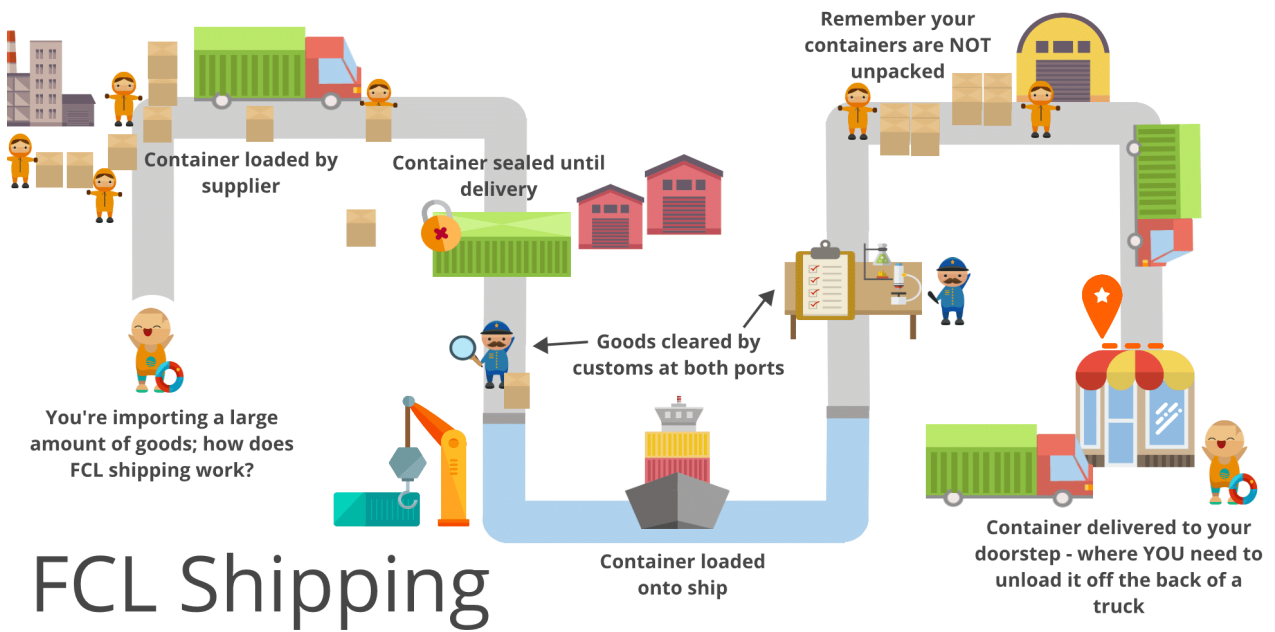
Vietnam Investment Review. Future trends and benefits in Vietnam's logistics sector. <https://vir.com.vn/future-trends-and-benefits-in-vietnams-logistics-sector-116838.html>

Vietnamnet Global. Vietnamese shipping fleet ranks third in ASEAN (12/2022). <https://vietnamnet.vn/en/vietnamese-shipping-fleet-ranks-third-in-asean-2096082.html>

Virginia Tech. Research Guides, Interview Method, 08/2023. <https://guides.lib.vt.edu/researchmethods/interviews>

# Appendices

## Appendix 1. FCL Delivery Process



## Appendix 2. Definitions of FCL Delivery Process

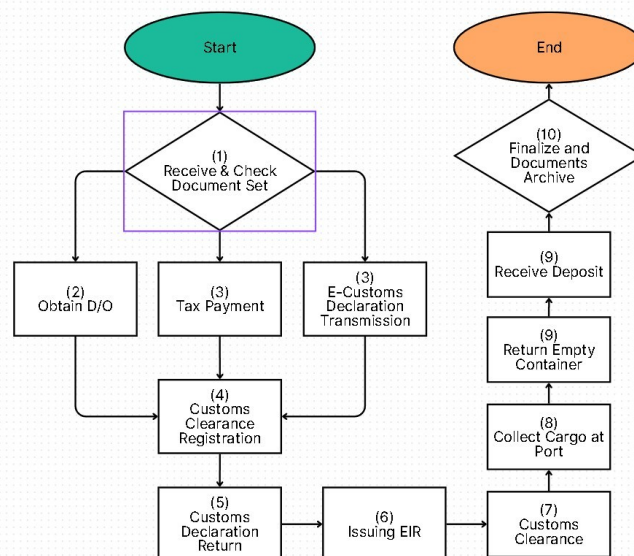
### Full Container Load (FCL) Definition

Describe shipments that consist of a “full container load”.

A shipment that only has one consignee in a single container and is not being shared with other shippers.

The buyer is renting the whole container space at a fixed rate.

## Appendix 3. Basic Workflow of Importing FCL Process



### Appendix 4. Incoterms 2020 Point of Delivery and Transfer of Risk

